

ADDENDUM

| | |
|------------------|---|
| Date Issued: | January 26, 2026 |
| Project: | Intermountain Health Riverton Hospital GI ASC 374 W 12600 S Riverton, UT 84065 |
| Addendum Number: | 2 |

The Contractors submitting proposals on the above-captioned project shall be governed by the following addendum, changes and explanations to the drawings and specifications and shall submit their bids in accordance therewith.

| Item Number | General Items Description |
|-------------|--|
| 1 | <p>Q. Regarding the integral blind windows, there is no specific verbiage about lead glass in note 08.03 on the interior elevations or on the window schedule in detail 4 / A601A. However there is note 09.02 on the OR Enlarged Plans on sheet A401 calling for lead lined walls that encapsulates the window. Please verify that window type 1 in OR 2 requires lead lined glass. And that the window in OR 1 will not require lead glass.</p> <p>A. Provide lead lined glass unit and lead lined hollow metal frame for OR 2 window. See attached sheets A401, A402, A601A. No lead lined glass or lead lined frame is required for OR 1 window.</p> |
| 2 | <p>Q. The plans call out to match existing ceiling tile. Can you please provide what the existing ceiling tile is?</p> <p>A. Existing ceiling as Ultima Heath Zone. See attached sheet A603A.</p> |
| 3 | <p>Q. Unicel does not offer a lead lined perimeter frame. They can provide an aluminum frame that is not lead lined with an insulated integral blind unit with lead equivalent glass in it. Another option would be to have a lead lined Hollow metal frame provided by others and we would only provide the insulated integral blind unit with lead equivalent glass. Please advise how to proceed.</p> <p>A. For window in OR 2, provide lead lined glass unit and lead lined hollow metal frame. See attached sheets A401, A402, A601A.</p> |
| 4 | <p>Q. On the insulated lead equivalent integral blind units, the thumbwheel or crank handle operator for the blinds can only be installed on the opposite side of the lead glass. There will be no way of operating the blinds from the OR side. Please verify that this is acceptable.</p> <p>A. This is acceptable. Provide thumbwheel operator on corridor (non-OR) side.</p> |

| | |
|---|--|
| 5 | <p>Q. We are unable to complete the One-Line without the location of the following equipment: Distribution Board H1DH1C, Panelboard H1H2C. Please provide location for H1DH1C and H1H2C.</p> <p>A. See Electrical Addendum #02</p> |
| 6 | <p>Q. Equipment Some items are listed on the plans but are not found in the schedule, can the schedule be updated to reflect these items if we are to supply and or install them or be excluded 1. RV-1 2. RV-2 3. HC-1 4. HC-2 5. SV-1 6. SV-2 7. OR-1 8. OR-2.</p> <p>A. See Mechanical Addendum #02.</p> |
| 7 | <p>Q. Some sheets have been updated to shown a new wall between the clean and dirty. Sheet 124 A and 127A are missing the wall. My question is the door that goes in between these spaces what's it's number? Is it in the door schedule. Also, does it need an auto opener. In the past we have added them for ease of transporting the scopes.</p> <p>A. See updated sheets A124A, A127A. The door in question, between the clean and dirty rooms, is A204A. No auto-opener is required.</p> |

| Sheet Number | Drawings |
|-------------------------------|---|
| Architectural Drawings | |
| A124A | Revise layout, wall and door tags, as indicated. This is the layout which was revised in Addendum #01 but this sheet was missing from that addendum. |
| A127A | Revise layout and finish tags as indicated. This is the layout which was revised in Addendum #01 but this sheet was missing from that addendum. |
| A401 | Revise keynotes, window and elevation tags as indicated. |
| A402 | Revise keynotes as indicated. |
| A601A | Revise sheet name as indicated. Revise door hardware groups and comments as indicated. Revise window types 4/A601A as indicated. Add detail 7/A601A as indicated. |
| A603A | Revise ceiling finish, "C2" as indicated. |
| Mechanical Drawings | |
| | See Mechanical Addendum #02 |
| Electrical Drawings | |
| | See Electrical Addendum #02 |



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| Specification Section | Project Manual |
|-------------------------------|---|
| Architectural Sections | |
| 08 7100 | Update door hardware sets as indicated. |

Attachments:

A124A, A127A, A401, A402, A601A, A603A, Mechanical Addendum #02, Electrical Addendum #02, Specification Section 08 7100



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Date: 1/21/26
Project No: 25232.00
Project: RVTN GI - ASC
Revision: Addendum #02

Addendum - The following revision, additions, deletions, and/or items of clarification shall hereby be included as an integral part of the Contract Documents for the above-listed project and shall be fully binding. All other requirements shall remain in effect of the original plans and specification.

DRAWINGS

Sheet: M600 – Mechanical Schedule

- Updated basis of design for CD2, CD3, and CD4.

PRIOR APPROVALS

| <u>Item</u> | <u>Manufacturer</u> | <u>Comments</u> |
|---------------------------------------|--------------------------|-----------------|
| Test and Balance | Building Control Systems | Approved |
| Hydronic Air Coils | Precision Coil | Approved |
| Laminar Flow Diffuser w/Integral LEDs | Price | Approved |

End of Addendum.



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Electrical Addendum #1

Date: January 26, 2026
To: Robert Howell
Company: NJRA Architects
Job: Riverton GI ASC
Job No: 250514
Cc:

From: Jason Worthen
Email: Jason.worthen@speceng.com
Phone: 801-834-9973
Re:

This Addendum shall be considered part of the Contract Documents and Project Manual for the above mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract Documents and Project Manual, the Addendum shall govern and take precedence.

Questions

1. We are unable to complete the One-Line without the location of the following equipment: Distribution Board HIDH1C, Panelboard H1H2C. Please provide location for H1DH1C and H1H2C

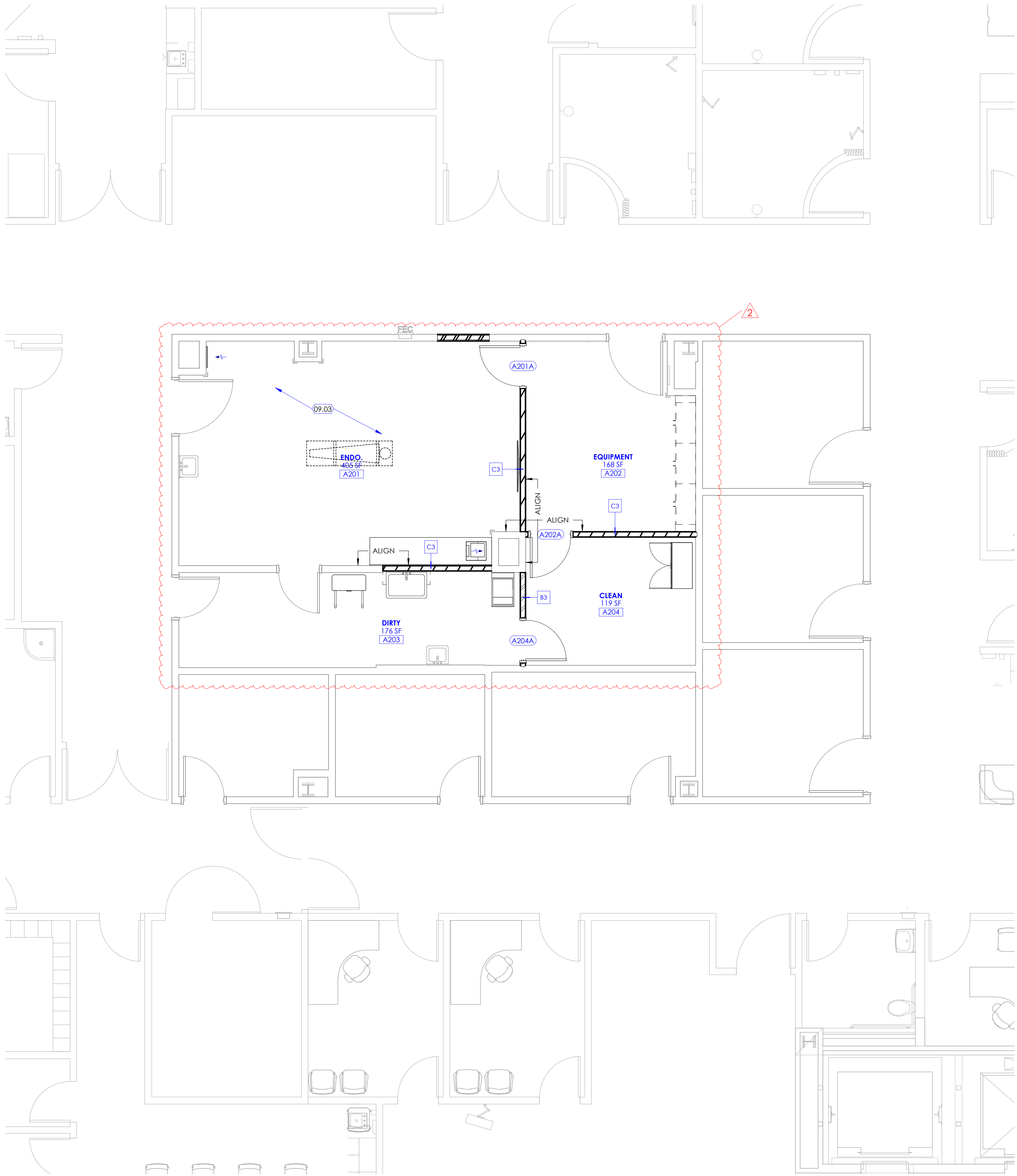
H1DH1C is no longer being used, the A section of the isolation panels will now be fed from 2H1C which is shown on the plans. H1H2C is located in the first floor electrical room directly below the electrical room shown on sheet EP101A.

Drawings

1. EP601 – One-Line Diagram
 - a. Revised one-line to feed isolation panels from a closer panel.

END OF ADDENDUM

Attachments < EP601 >



KEYED NOTES

09.03 PATCH ALL WALLS TO MATCH EXISTING LEAD SHIELDING

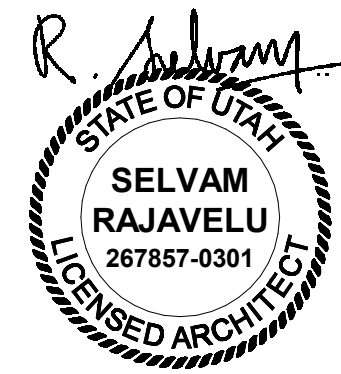
GENERAL NOTES

- A. SEE SHEET G003 AND G005 FOR SYMBOLS, GENERAL NOTES AND LEGEND.
- B. SEE SHEET A505A FOR CABINET LEGEND.
- C. SEE SHEET A601A FOR DOOR SCHEDULE.
- D. SEE SHEET A602A FOR WINDOW SCHEDULE.
- E. SEE SHEET A603A FOR FINISH SCHEDULE AND GENERAL NOTES.

KEY PLAN



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GI - ASC

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Riverton, UT 84065

NJRA Project # 25232.00
Construction Documents Nov. 17, 2025
2 Addendum #2 Jan. 6, 2026

Dimension
Plan Level 2 -
Area A

A124A

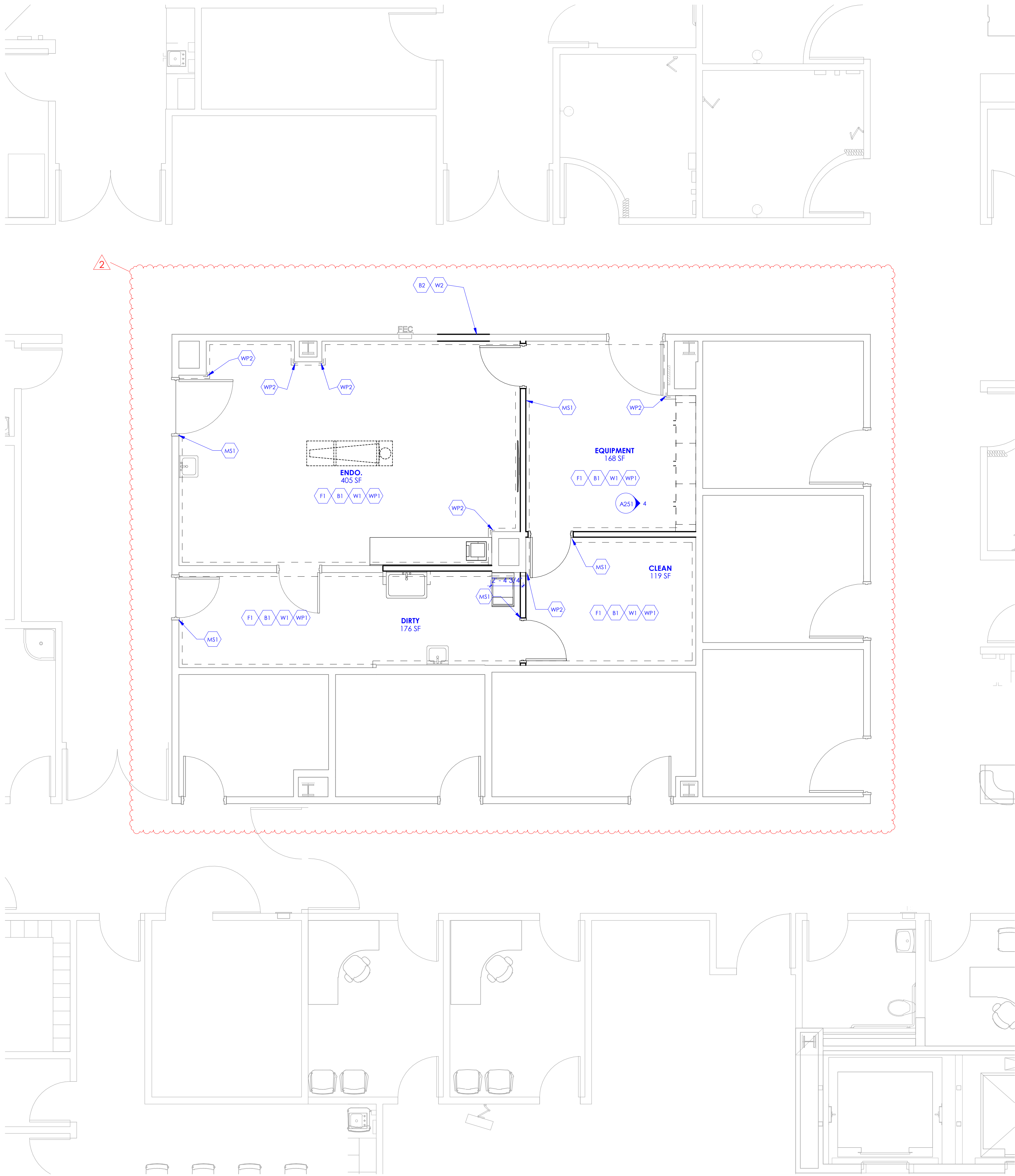


1/26/2026 3:37:47 PM

1

Finish Floor Plan Level 2 - Area A

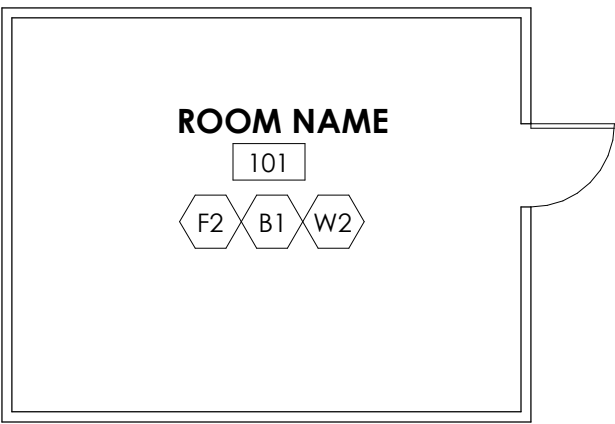
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KEYED NOTES

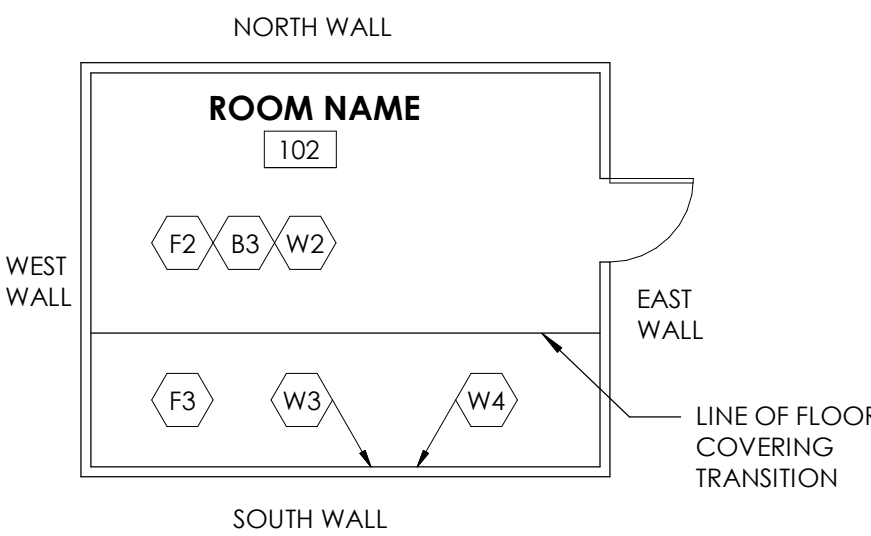
SAMPLE LAYOUTS

SAMPLE LAYOUT 1



NOTE: AS INDICATED IN ROOM NUMBER 101, MAJORITY OF THE ROOMS IN THE PROJECT SHALL HAVE A SINGLE TYPE OF FLOOR FINISH, WALL BASE AND WALL FINISH. WALL FINISH INDICATED AS "W2" SHALL APPLY TO ALL FOUR WALLS FROM FLOOR TO CEILING.

SAMPLE LAYOUT 2

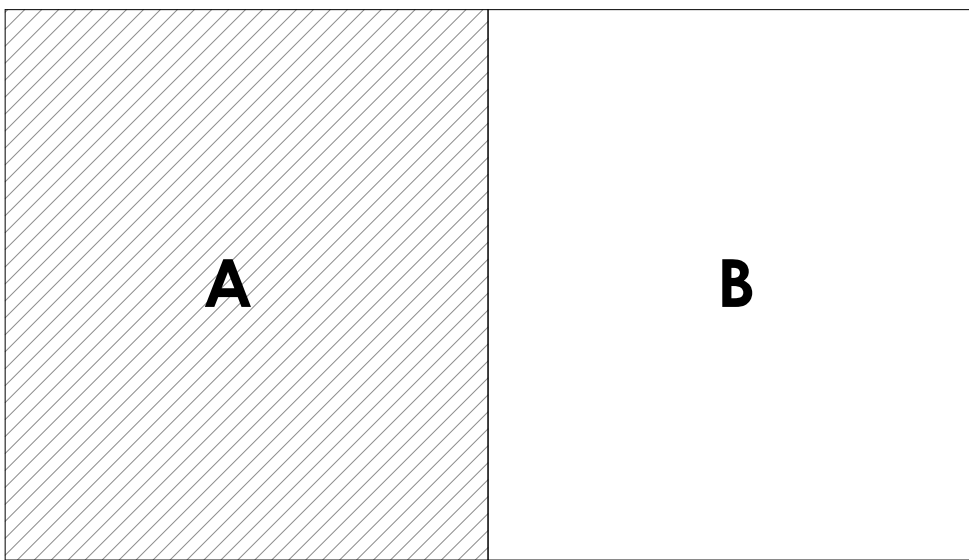


NOTE: AS INDICATED IN ROOM NUMBER 102, SOME ROOMS SHALL HAVE MULTIPLE FLOOR AND WALL FINISHES. SEE GENERAL NOTE "C" ON SHEET A603A FOR FLOOR COVERING TRANSITIONS. THE WALL FINISH INDICATED AS "W2" IN THE ROOM. [WITHOUT AN ARROW POINTING TO ANY SPECIFIC WALL] SHALL APPLY TO THE WEST, NORTH AND EAST WALL. WHERE WALL FINISHES ARE INDICATED WITH AN ARROW POINTING TO THE SOUTH SIDE, WALL SHALL HAVE MULTIPLE FINISHES SUCH AS "W3" AND "W4". SEE INTERIOR ELEVATIONS FOR TRANSITION DETAILS BETWEEN "W3" AND "W4".

GENERAL NOTES

- A. SEE SHEET G003 AND G005 FOR SYMBOLS, GENERAL NOTES AND LEGEND.
- B. SEE SHEET A505A FOR CABINET LEGEND.
- C. SEE SHEET A601A FOR DOOR SCHEDULE.
- D. SEE SHEET A602A FOR WINDOW SCHEDULE.
- E. SEE SHEET A603A FOR FINISH SCHEDULE AND GENERAL NOTES.

KEY PLAN



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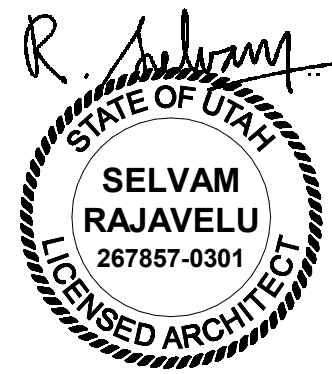
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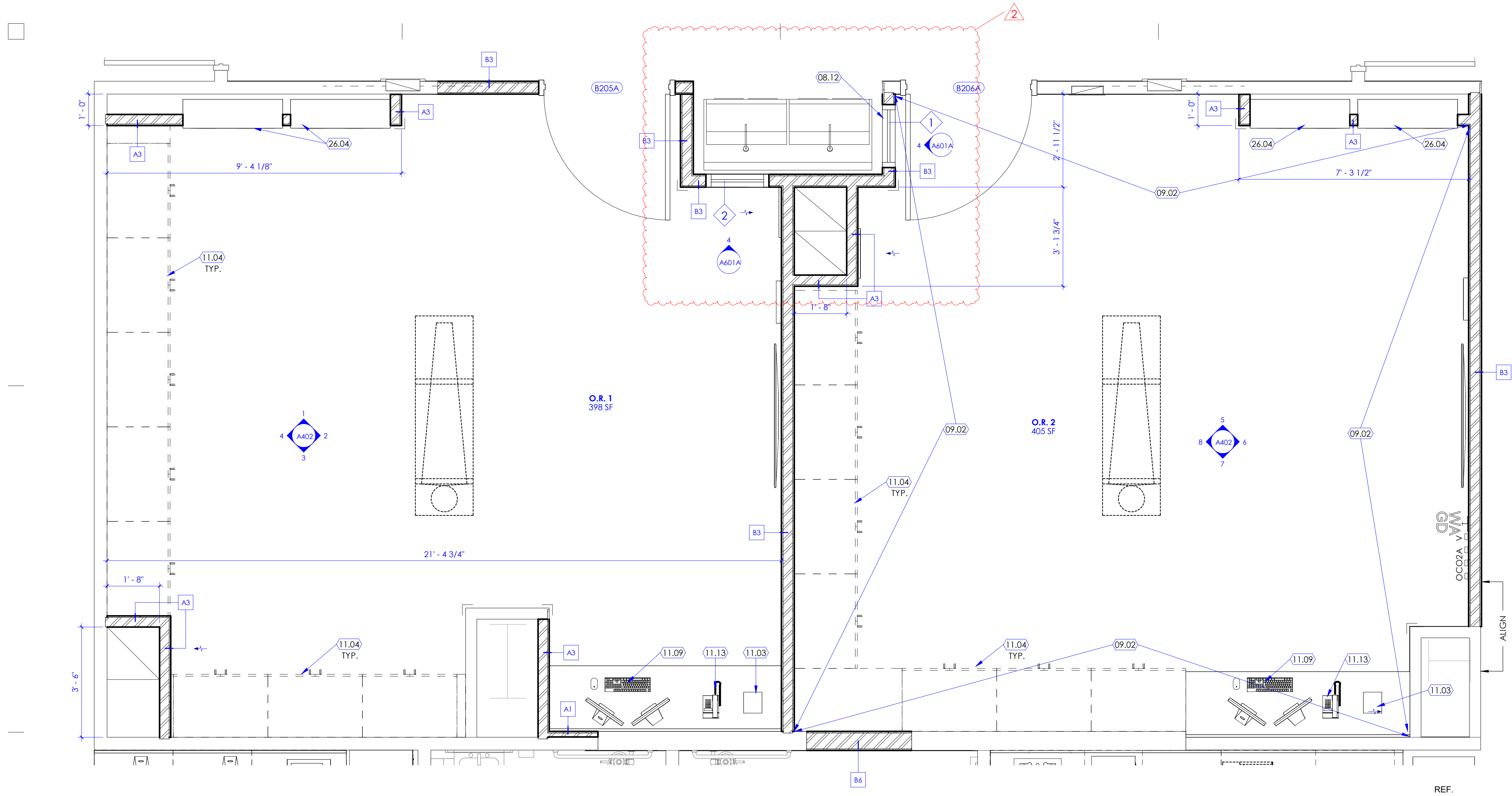
Finish Plan
Level 2 - Area
A

A127A

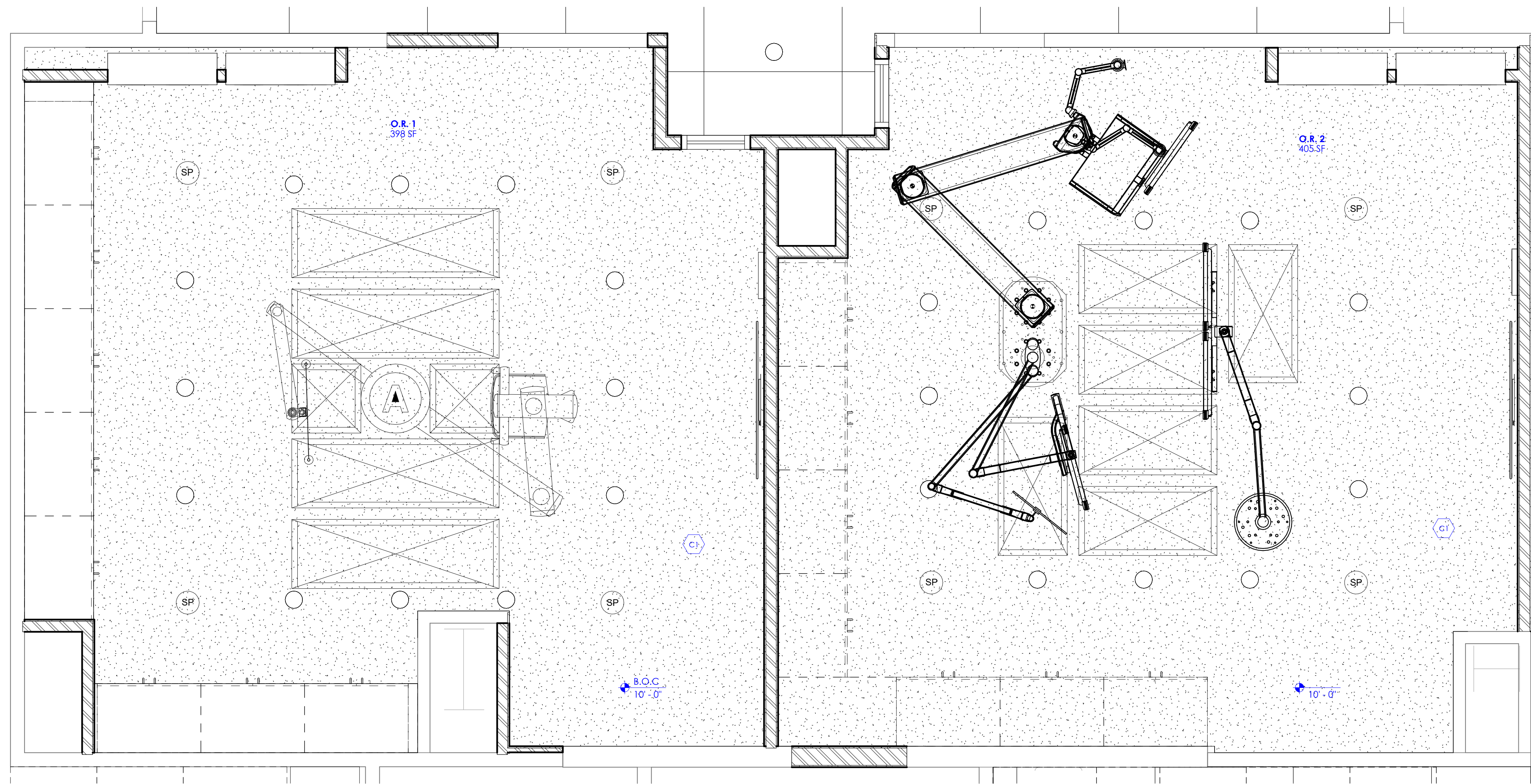


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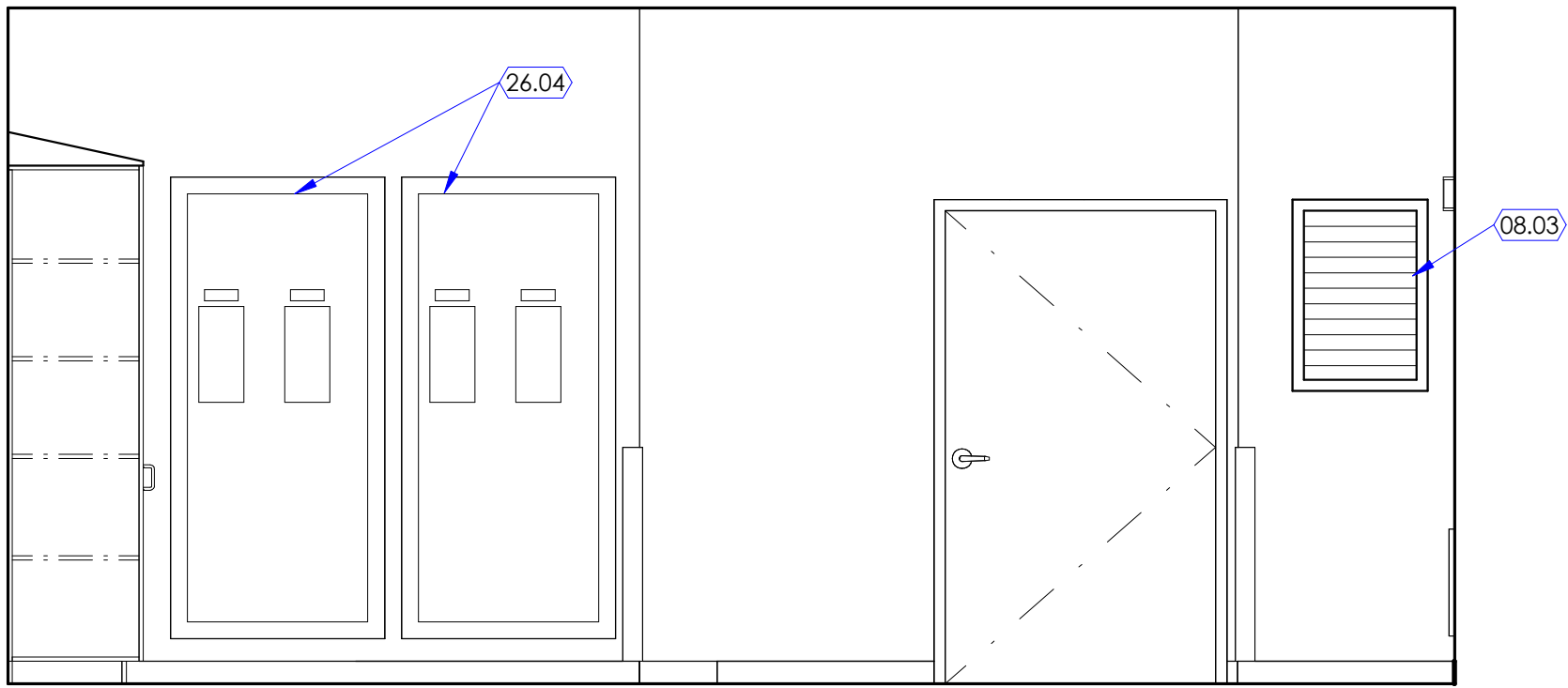
1 Level 2 Floor Plan - Area B - OR Enlarged Plans
SCALE: 1/2" = 1'-0"



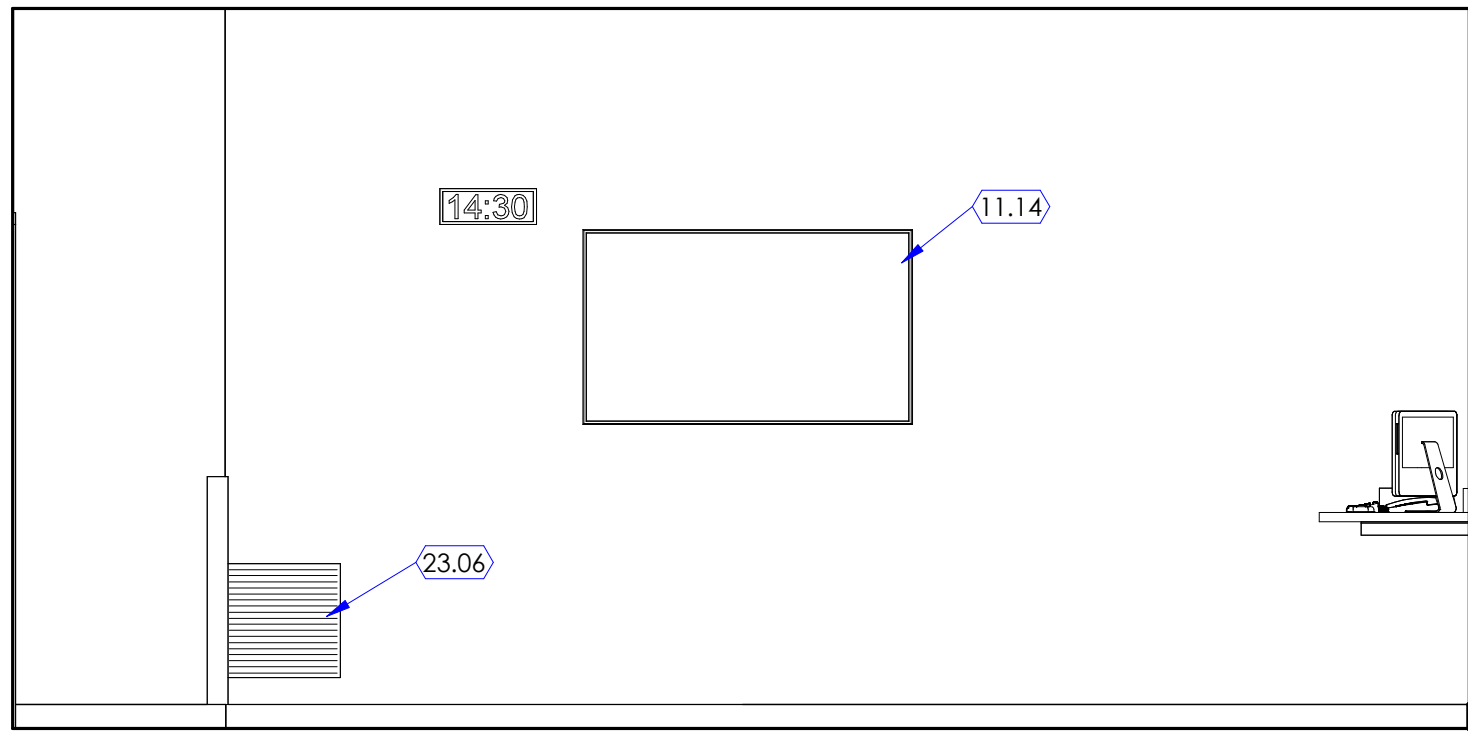
2 Level 2 Reflected Ceiling Plan Area B - Enlarged Plan
SCALE: 1/2" = 1'-0"

KEYED NOTES

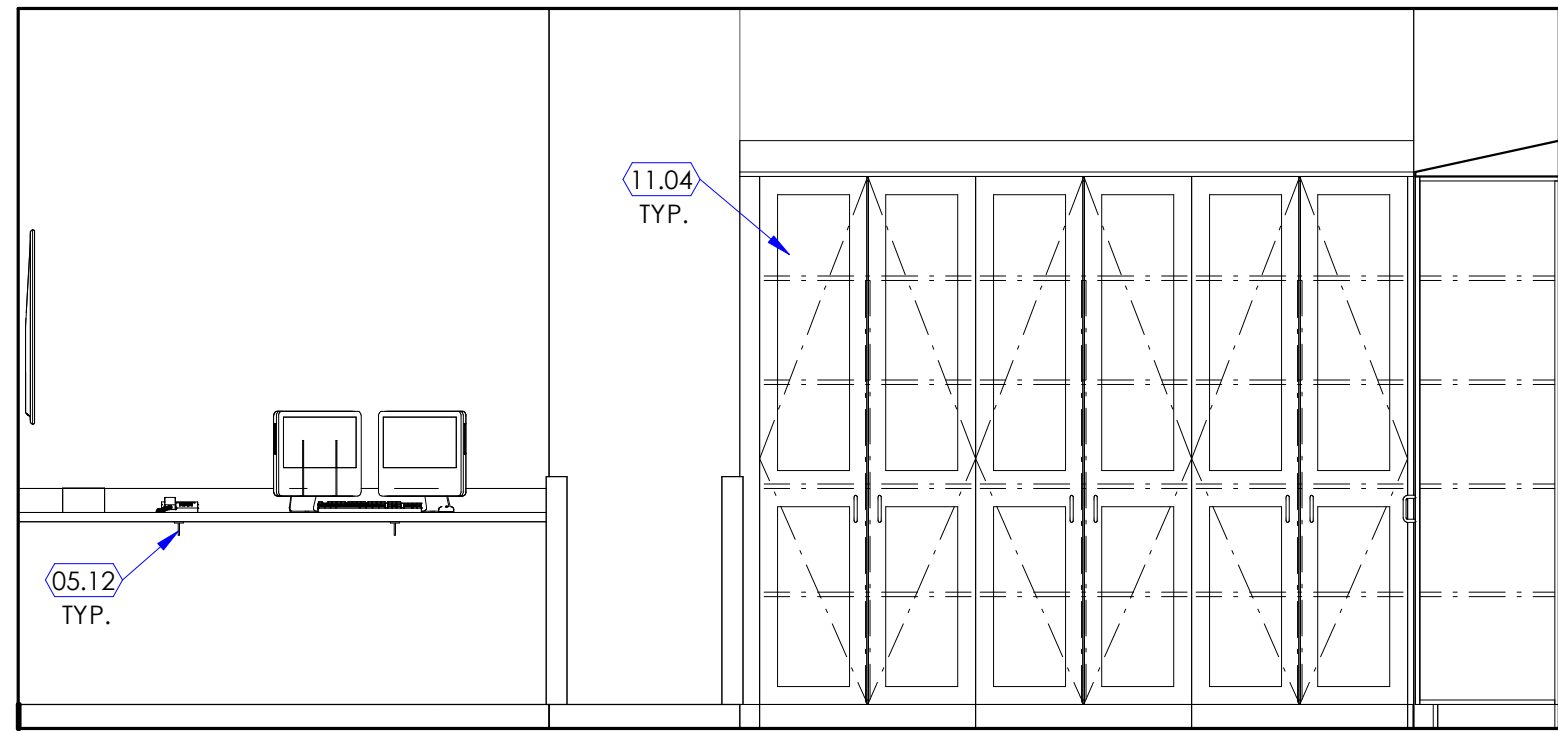
- 08.12 OR WINDOW WITH INTEGRAL GLAZING UNIT AND HOLLOW METAL FRAME. EACH LEAD LINED AS REQUIRED TO MATCH ADJACENT WALL LINING. SEE PHYSICIST'S REPORT. SEE 4/A601A.
- 09.02 LEAD LINED DRYWALL. PROVIDE 4# (1/16") LEAD LINED DRYWALL. SEE PHYSICIST'S SHIELDING REPORT.
- 11.03 LABEL PRINTER. OWNER FURNISHED OWNER INSTALLED.
- 11.04 INNERSPACE CABINETS. OWNER FURNISHED. VENDOR INSTALLED.
- 11.09 COMPUTER. NOT IN CONTRACT. OWNER FURNISHED OWNER INSTALLED. PROVIDE GROMMET IN COUNTERTOP WHERE COMPUTER OCCURS ON COUNTER WITH KNEE SPACE BELOW.
- 11.13 PHONE
- 26.04 ELECTRICAL ISOLATION PANEL. SEE ELECTRICAL DRAWINGS.



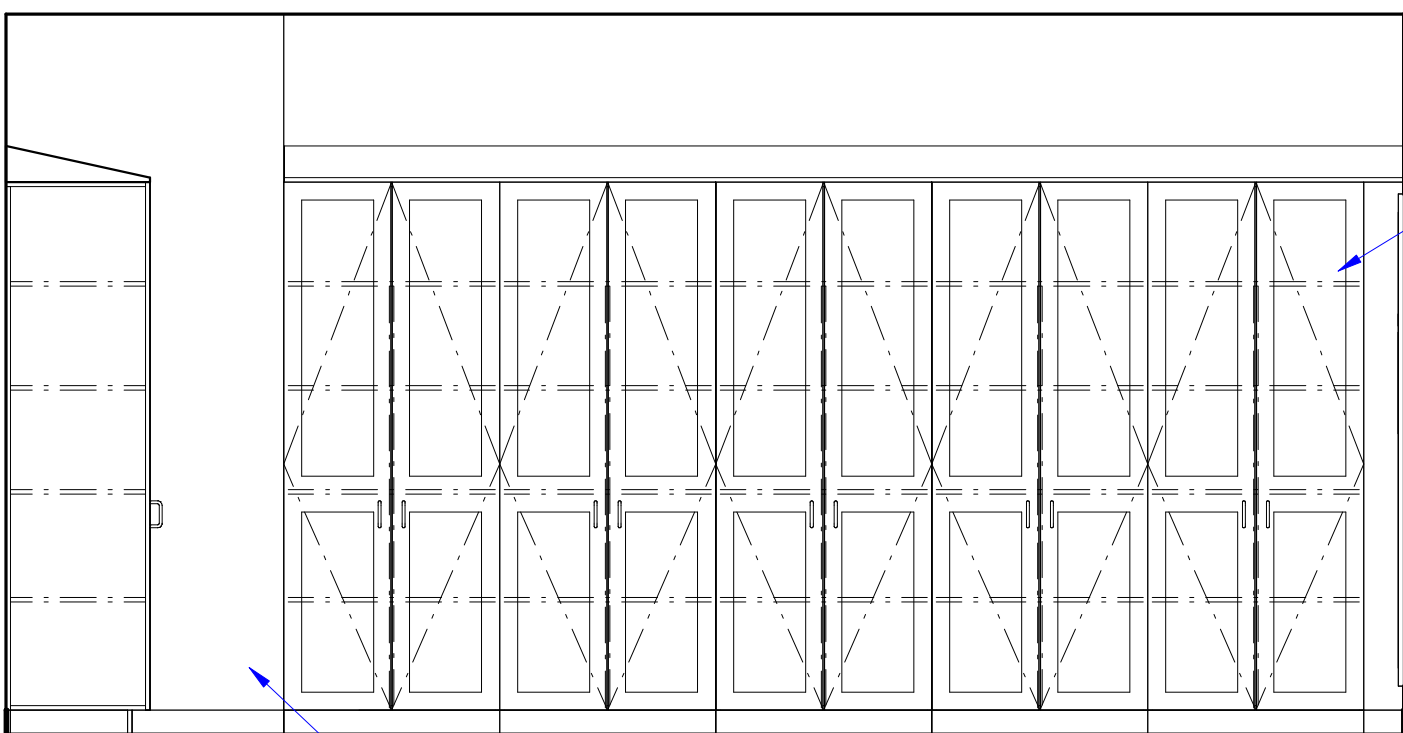
1 OR #1
SCALE: 3/8" = 1'-0"



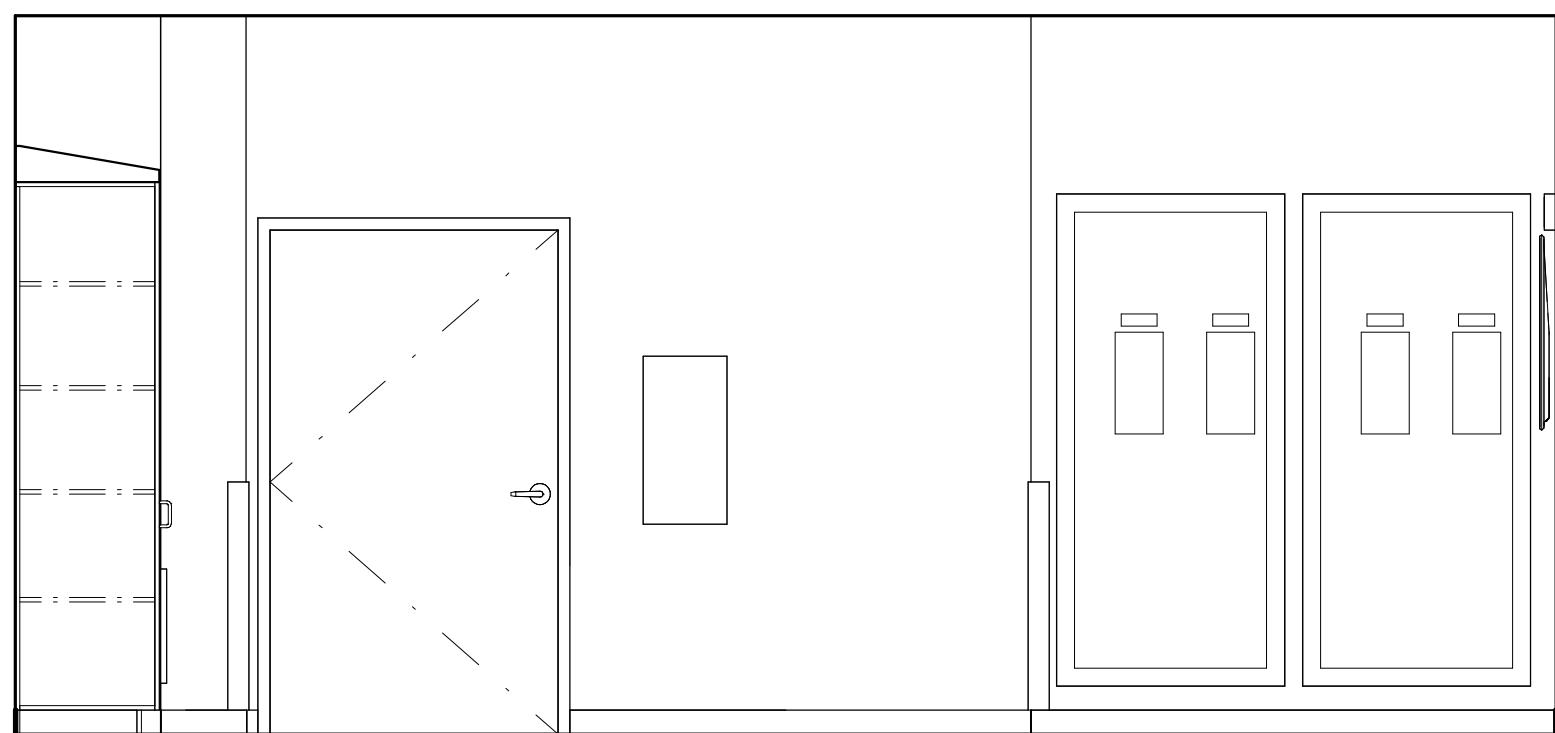
2 OR #1
SCALE: 3/8" = 1'-0"



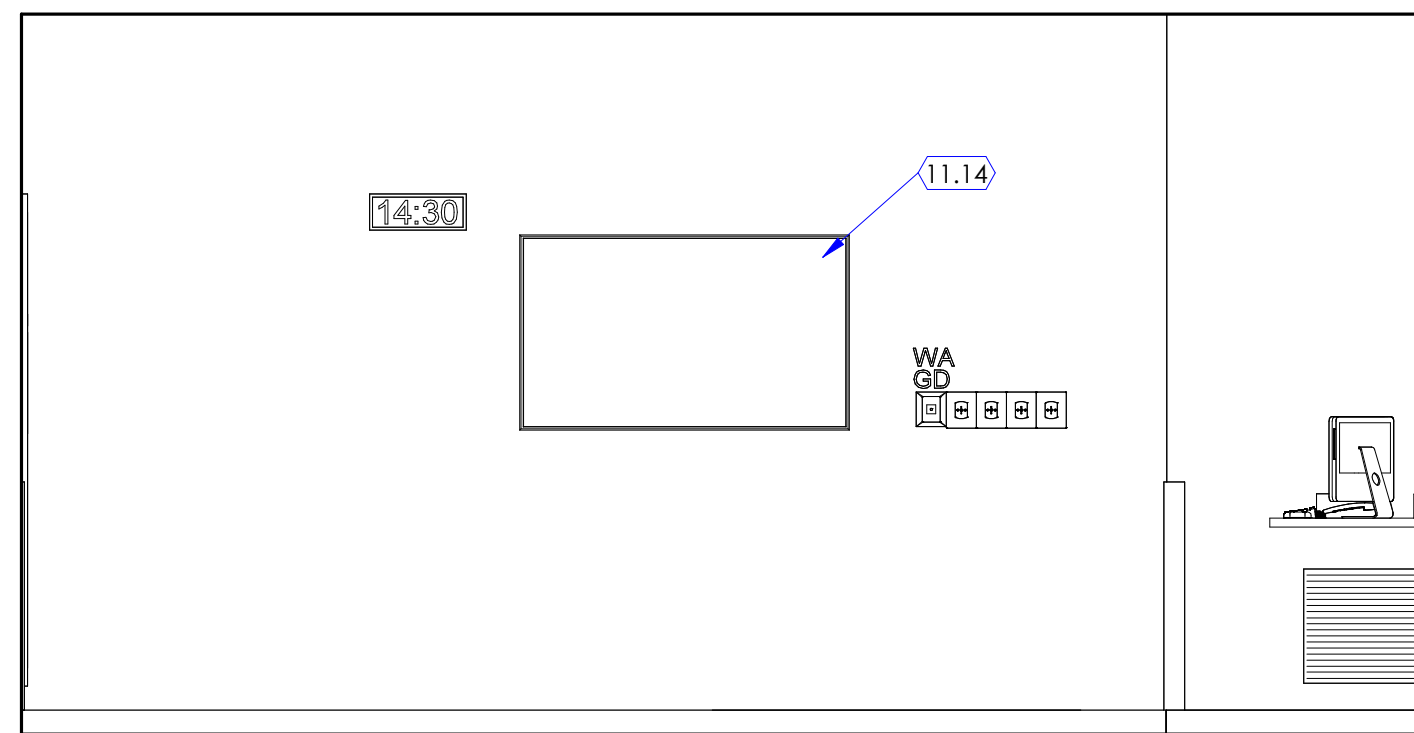
3 OR #1
SCALE: 3/8" = 1'-0"



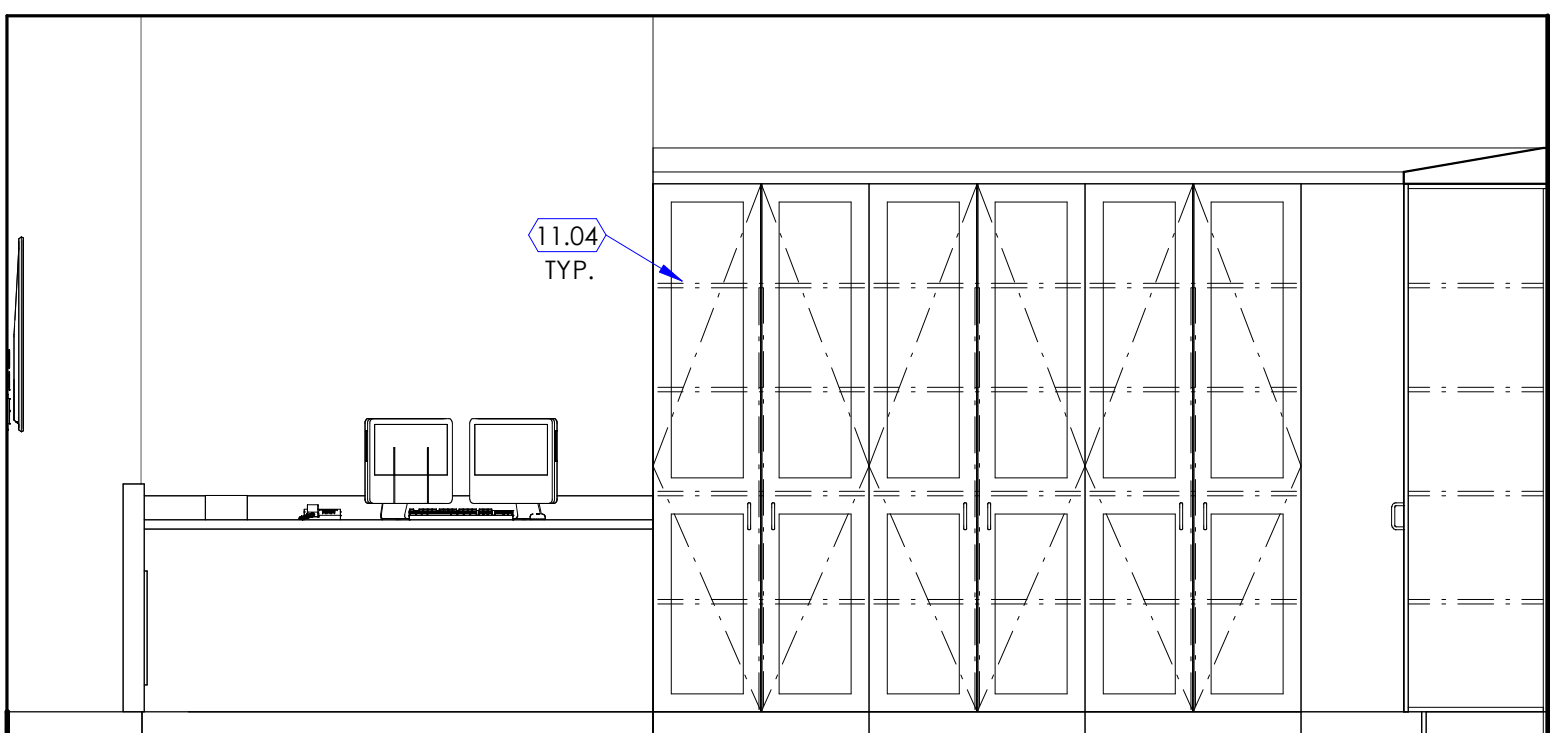
4 OR #1
SCALE: 3/8" = 1'-0"



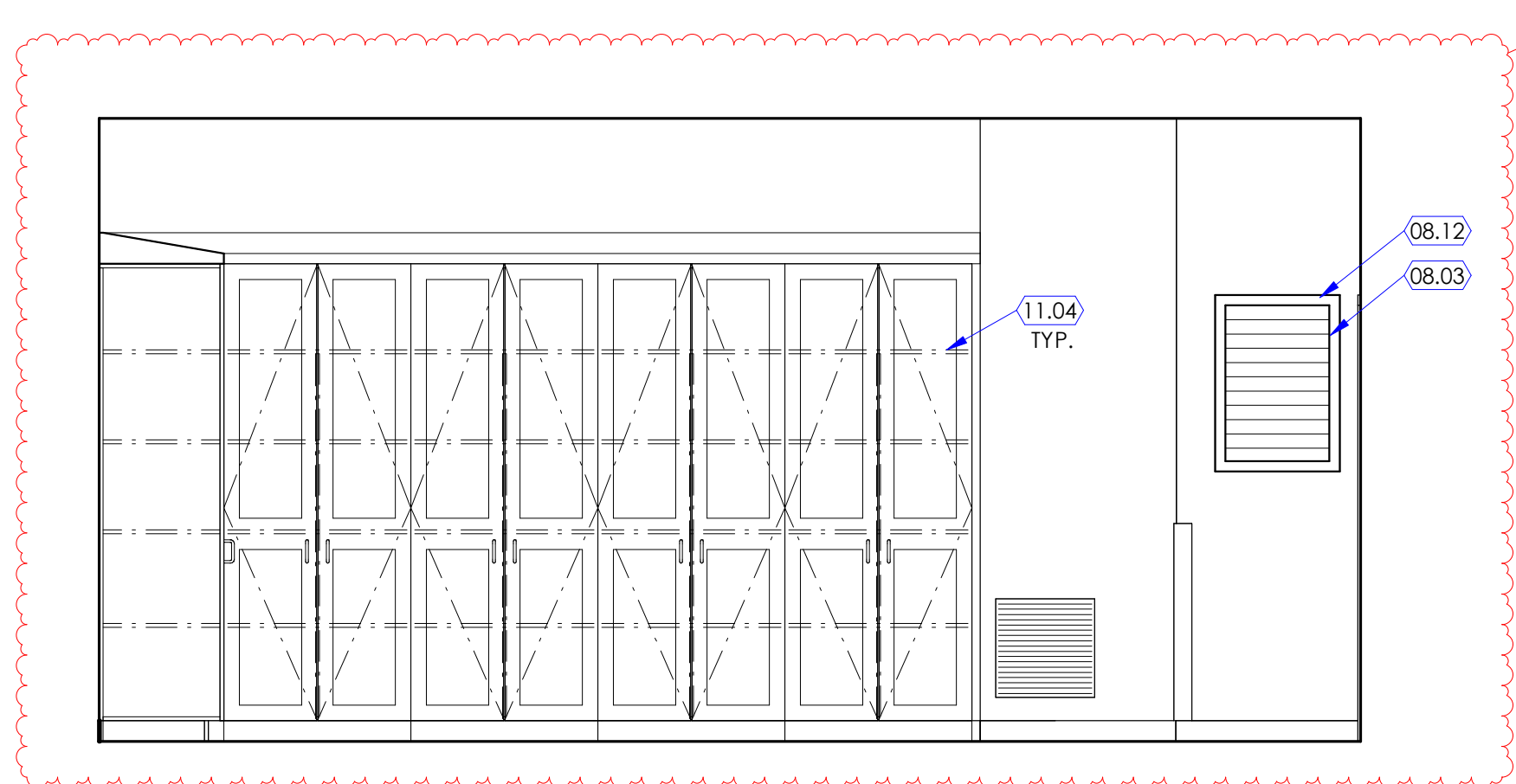
5 OR #2
SCALE: 3/8" = 1'-0"



6 OR #2
SCALE: 3/8" = 1'-0"



7 OR #2
SCALE: 3/8" = 1'-0"



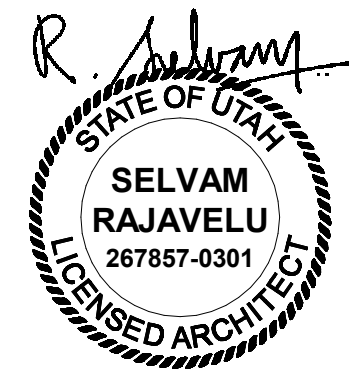
8 OR #2
SCALE: 3/8" = 1'-0"

KEYED NOTES

- 05.12 STEEL ANGLE SUPPORTS FOR COUNTERTOP WHERE KNEE SPACE OCCURS BELOW. LOCATE COUNTER SUPPORTS AT 4'-0" O.C. MAX. SEE DETAILS 4/A505B AND 5/A505B.
- 08.03 INSULATED GLAZING UNIT WITH INTEGRAL LOUVERS. BASIS OF DESIGN: VISION CONTROL BY UNICELL ARCHITECTURAL ENTIRE ASSEMBLY TO BE MANUFACTURED BY UNICELL. PROVIDE ALUMINUM KNOB FOR OPERATING LOUVERS. COLOR: DURAGRAN GRAY.
- 08.12 OR WINDOW WITH INTEGRAL GLAZING UNIT AND HOLLOW METAL FRAME. EACH LEAD LINED AS REQUIRED TO MATCH ADJACENT WALL LINING. SEE PHYSICIST'S REPORT. SEE 4/A601A.
- 11.04 INNERSPACE CABINETS, OWNER FURNISHED, VENDOR INSTALLED.
- 11.14 TELEVISION (TV), NOT IN CONTRACT. OWNER FURNISHED OWNER INSTALLED. PROVIDE WALL MOUNTED METAL BRACKET TO SUPPORT THE TV. BRACKET SIZE AND MODEL SHALL BE BASED ON THE TV SIZE. PROVIDE PLYWOOD BACKING IN WALL AS REQUIRED TO SUPPORT THE TV BRACKET. PROVIDE POWER, DATA AND HDMI PORT. SEE ELECTRICAL DRAWINGS.
- 23.06 WALL-MOUNTED DIFFUSER. SEE MECHANICAL DRAWINGS.
- 26.04 ELECTRICAL ISOLATION PANEL. SEE ELECTRICAL DRAWINGS.



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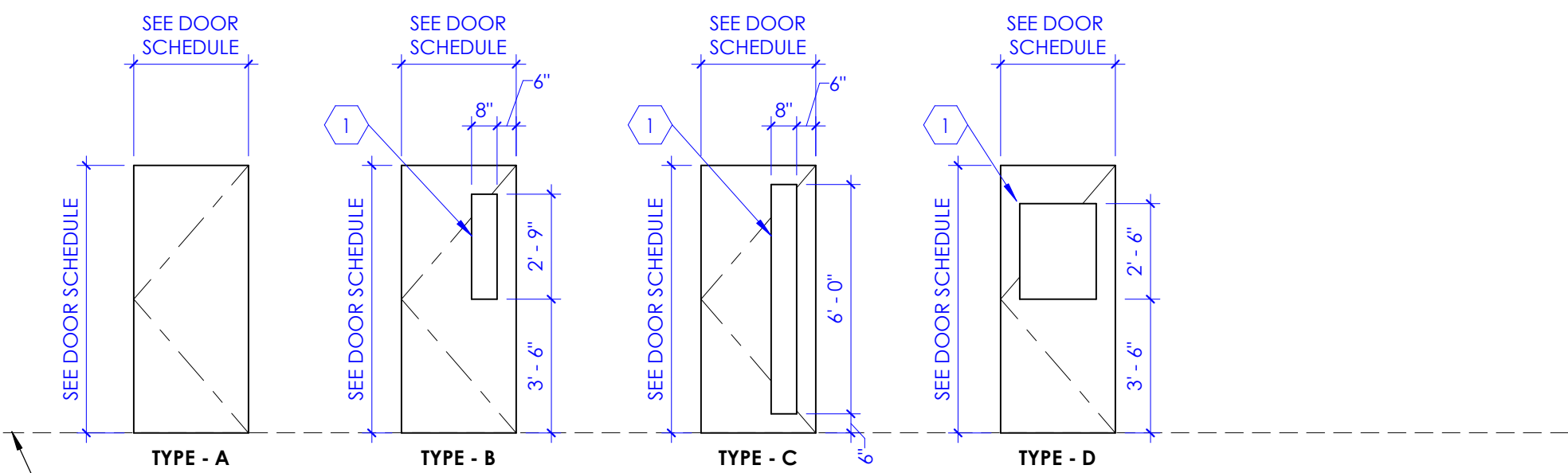
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Enlarged
View

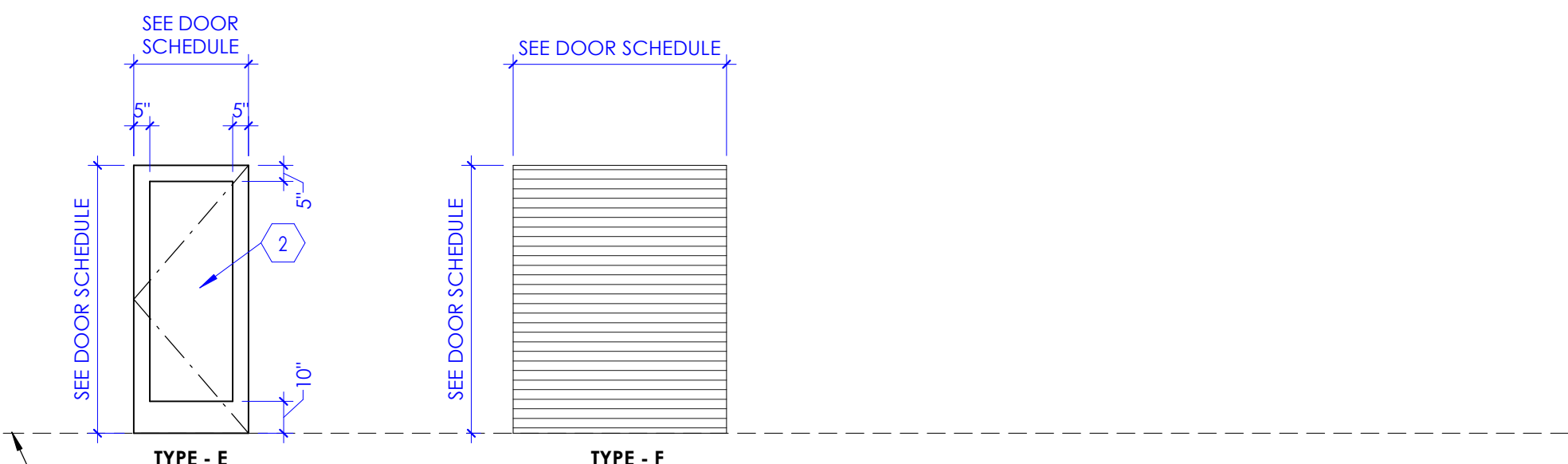
A402

KEYED NOTES

- VISION PANEL, GLAZING IN VISION PANEL SHALL BE 1/4" THICK, CLEAR, TEMPERED, GLAZING, FOR WOOD DOOR. PROVIDE WOOD TRIM FRAME FLUSH WITH THE FACE OF THE DOOR, AROUND THE VISION PANEL OPENING. STAIN AND SPECIES OF WOOD TRIM SHALL MATCH WOOD DOOR. FOR HOLLOW METAL DOOR, PROVIDE METAL TRIM AROUND VISION PANEL. GLAZING SHALL BE FIRE RATED IF DOORS ARE REQUIRED TO BE FIRE RATED.
- FOR EXTERIOR DOORS OF THIS TYPE, GLAZING SHALL BE TINTED, INSULATED, TEMPERED, LOW E, AND 1" THICK. FOR INTERIOR DOORS OF THIS TYPE, GLAZING SHALL BE CLEAR, TEMPERED AND 1/4" THICK. STAINLESS STEEL WELDED WIRE MESH (15 GAUGE) ATTACHED TO DOOR, PROVIDE FRAME AROUND THE OPENING IN DOOR TO SECURE THE MESH IN PLACE.
- METAL LOUVER IN DOOR FOR VENTILATION.



DASHED LINE DENOTES
FINISH FLOOR



DASHED LINE DENOTES
FINISH FLOOR

1 Door Types

SCALE: 1/4" = 1'-0"

NOTE: REFER TO "DOOR SCHEDULE" TABLE FOR DOOR TYPES REQUIRED FOR THIS PROJECT. SOME DOOR TYPE ELEVATIONS INDICATED ABOVE, MAY NOT BE APPLICABLE TO THIS PROJECT.

DOOR SCHEDULE

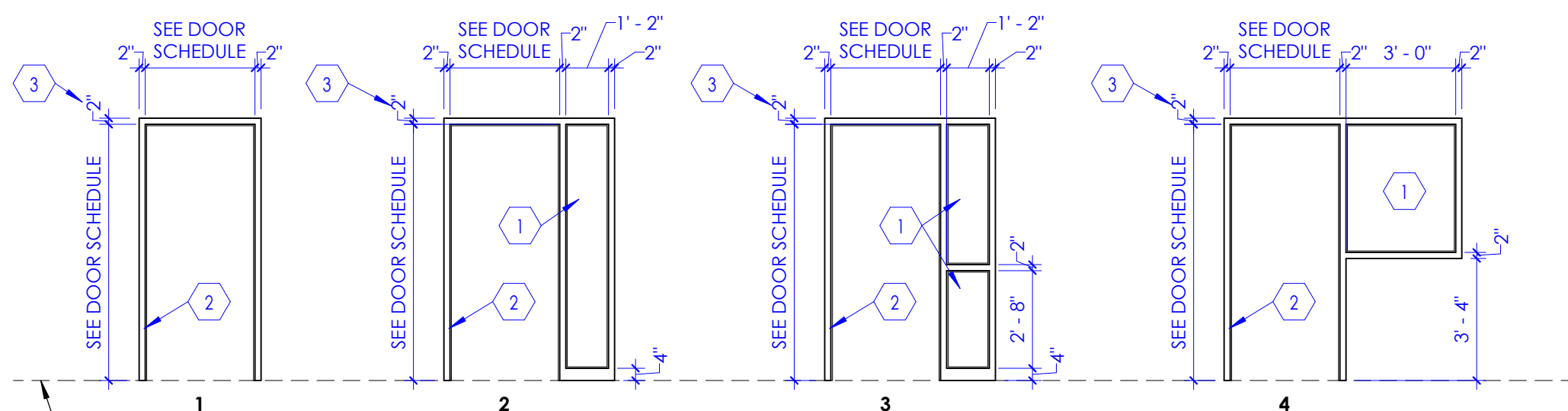
| DOOR # | # OF PANELS | DOOR | | | | | | FRAME | | | DETAILS | | | DOOR # | FIRE RATING (MINUTES) | HARDWARE GROUP | COMMENTS |
|--------|-------------|-------------|----|---------|-----------|----------|----------------|----------------|--------|----------|---------|------|-----------|--------|-----------------------|----------------|----------|
| | | WIDTH | | SIZE | | | | TYPE (2/A601A) | DEPTH | MATERIAL | JAMB | HEAD | THRESHOLD | | | | |
| | | W1 | W2 | HEIGHT | THICKNESS | MATERIAL | TYPE (1/A601A) | | | | | | | | | | |
| A201A | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | A201A | | 1,1 | 2 |
| A202A | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | A202A | | 1 | |
| A204A | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | A204A | | 1 | |
| B121B | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B121B | | 3 | |
| B201A | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B201A | | 3 | |
| B202A | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B202A | 45 | 3 | |
| B202B | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B202B | 45 | 3 | |
| B202C | 1 | 3' - 0" | | 7' - 0" | EXIST. | EXIST. | EXIST. | EXIST. | EXIST. | EXIST. | | | | B202C | | 7 | 1 |
| B205A | 1 | 4' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B205A | | 4 | |
| B206A | 1 | 4' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B206A | | 4,1 | 2 |
| B209A | 1 | 4' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 8 1/4" | HM | | | | B209A | | 2 | |
| B210A | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 8 1/4" | HM | | | | B210A | | 5 | |
| B211A | 1 | 3' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B211A | | 5 | |
| B212A | | 3' - 4 1/2" | | 7' - 0" | | | | | | | | | | B212A | | 6 | |
| B213A | 1 | 4' - 0" | | 7' - 0" | 1 3/4" | WD | A | 1 | 5 7/8" | HM | | | | B213A | 45 | 8 | |

COMMENTS

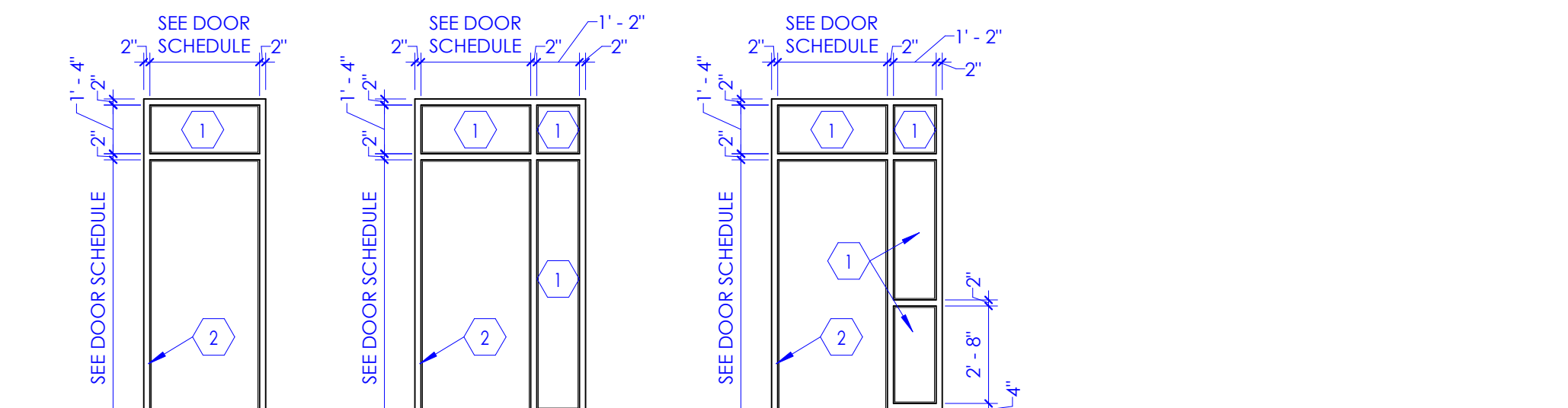
- PROVIDE CARD READER.
- PROVIDE LEAD LINED DOOR WITH LINING EQUIVALENT TO ADJACENT LEAD LINED WALLS.

KEYED NOTES

- GLAZING SHALL BE CLEAR, TEMPERED, AND 1/4" THICK.
- DOOR FRAME, SEE DOOR SCHEDULE.
- WHERE DOOR OCCURS AT MASONRY WALL (8" HIGH, C.M.U. BLOCKS), AND WITH A TYPICAL DOOR HEIGHT OF 7'-0", USE 4" FRAME AS FRAME HEAD INSTEAD OF THE STANDARD 2" FRAME.



DASHED LINE DENOTES
FINISH FLOOR



DASHED LINE DENOTES
FINISH FLOOR

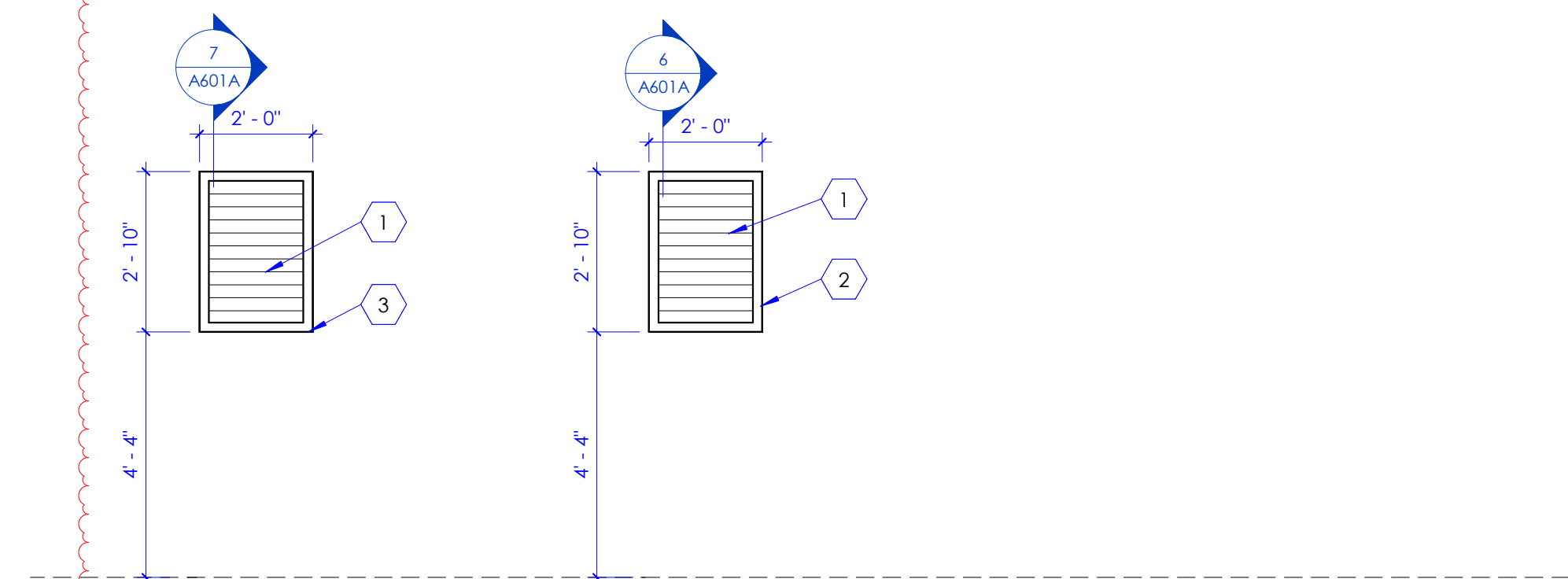
2 Frame Types

SCALE: 1/4" = 1'-0"

NOTE: REFER TO "DOOR SCHEDULE" FOR FRAME TYPES REQUIRED FOR THIS PROJECT. SOME FRAME TYPE ELEVATIONS INDICATED ABOVE MAY NOT BE APPLICABLE TO THIS PROJECT.

KEYED NOTES

- INSULATED GLAZING UNIT WITH INTEGRAL BLINDS IN VISION PANEL. BASIS OF DESIGN: UNICELL ARCHITECTURAL CORP. TRADE NAME - VISION CONTROL, LEAD LINED AS REQUIRED.
- ALUMINUM WINDOW FRAME 1 3/4" X 5", TYP. BY UNICELL.
- HOLLOW METAL FRAME, LEAD LINED AS REQUIRED.



4 Window Types

SCALE: 3/8" = 1'-0"

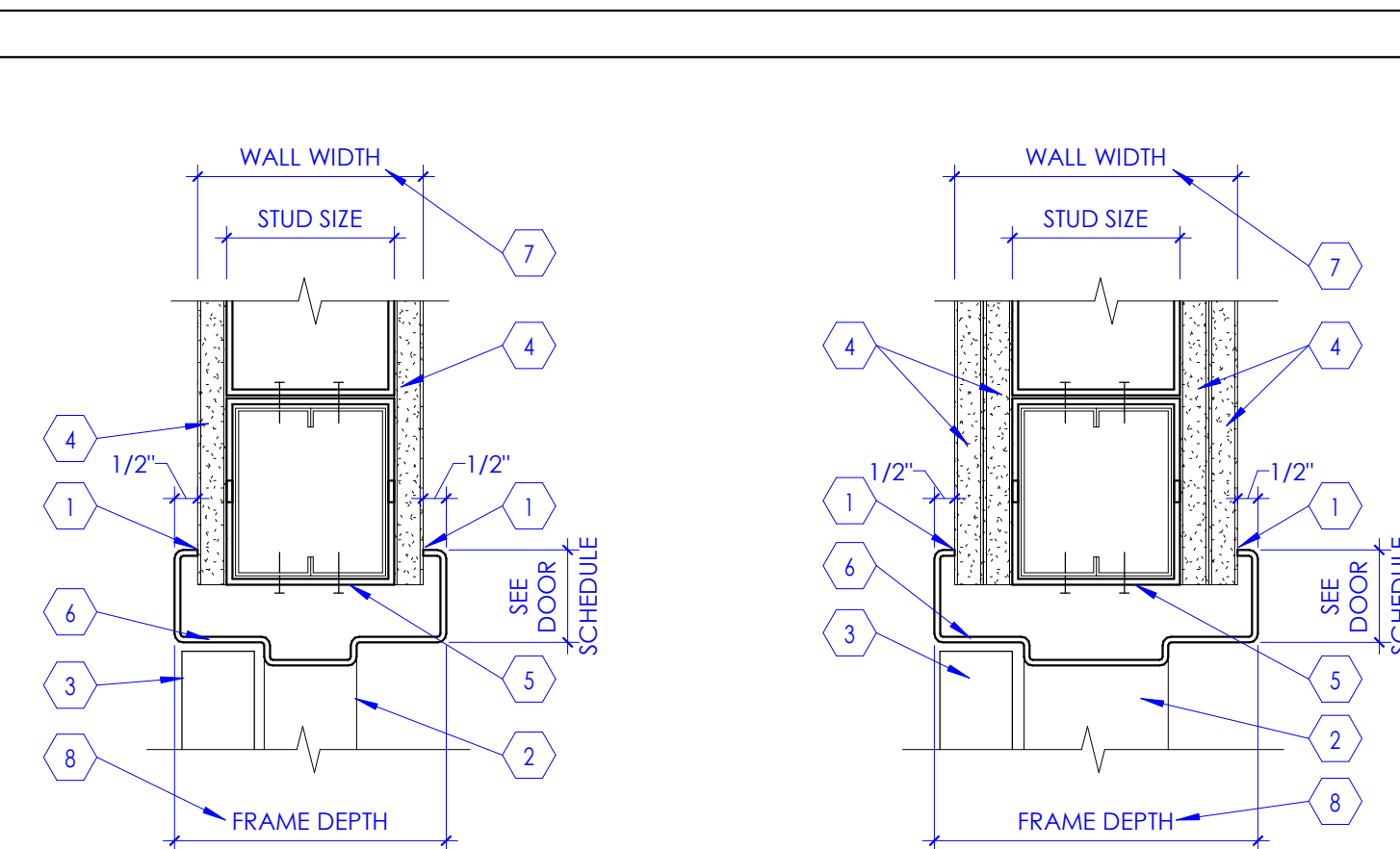
DASHED LINE DENOTES
FINISH FLOOR

KEYED NOTES

- CONTINUOUS SEALANT ON BOTH SIDES OF THE FRAME.
- WINDOW FRAME SEEN BEYOND.
- WINDOW GLAZING STOP, REMOVABLE, 1" X 1" X 1/4". STOPS SHALL BE LOCATED ON THE MORE SECURE ROOM SIDE (AS OPPOSED TO THE LESS SECURE CORRIDOR SIDE). COORDINATE WITH ARCHITECT FOR LESS AND MORE SECURE AREAS THAT ARE NOT APPARENT IN FLOOR PLAN.
- GLAZING, TEMPERED, CLEAR, 1/4" THICK, TYPICAL U.N.O.
- ALUMINUM WINDOW FRAME BY VISION CONTROL.
- GYPSUM BOARD, 5/8" THICK, TYPE 'X', TYPICAL, ATTACH TO METAL STUDS. SEE WALL TYPES.
- WINDOW HEAD FRAMING, SEE DETAIL 11/A502A.
- INSULATED GLAZING UNIT WITH OPERABLE LOUVERS, BASIS OF DESIGN: VISION CONTROL GLAZING BY UNICELL ARCHITECTURAL CORP. TRADE NAME - VISION CONTROL. SEE PROJECT MANUAL FOR DETAILS. THIS WHOLE ASSEMBLY SHALL BE MANUFACTURED BY UNICELL ARCHITECTURAL CORP.
- WOOD SHIM AS REQUIRED.

6 Window Frame - Head Detail

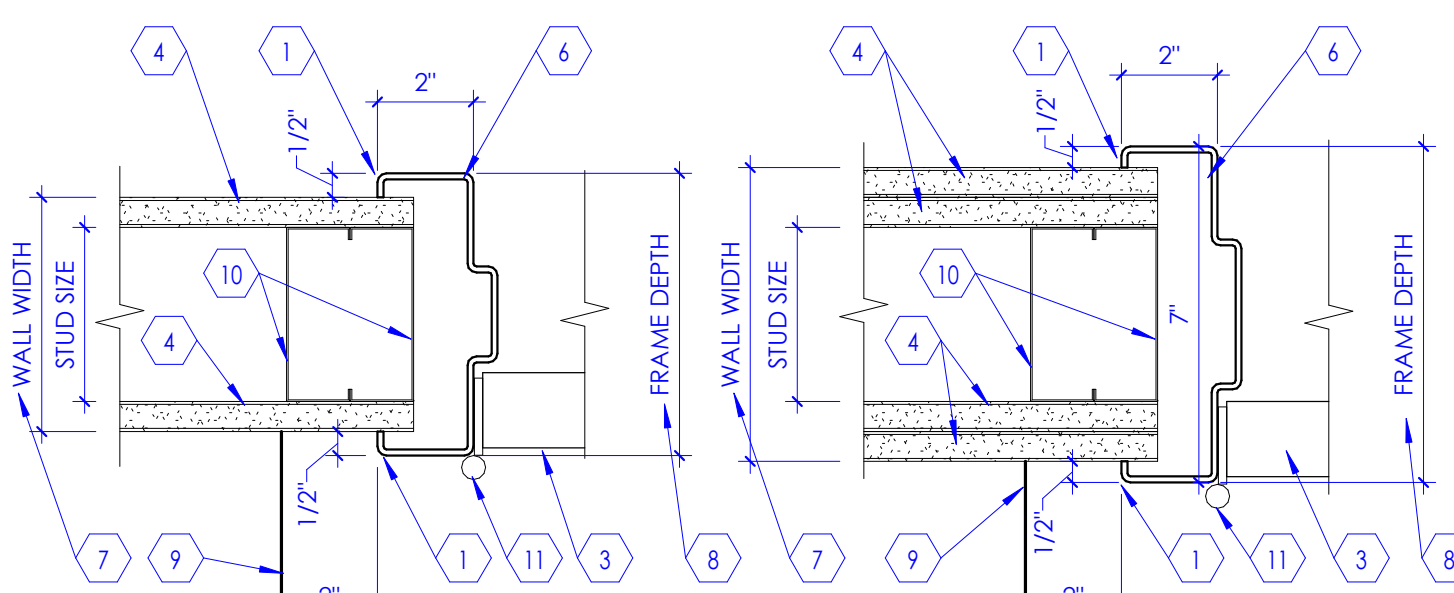
SCALE: 3" = 1'-0"



HEAD DETAIL - SECTION VIEW

KEYED NOTES

- CONTINUOUS SEALANT ON BOTH SIDES OF THE FRAME.
- DOOR FRAME SEEN BEYOND.
- DOOR, SEE DOOR SCHEDULE FOR DOOR TYPE.
- GYPSUM BOARD, 5/8" THICK, TYPE 'X', ATTACH TO METAL STUD FRAMING. SEE WALL TYPES.
- STEEL RUNNER (18 GAUGE) FASTENED WITH SCREWS TO STUDS AT EACH END. SEE DETAIL 6/A502A.
- HOLLOW METAL DOOR FRAME, FRAME THICKNESS VARIES WITH WALL THICKNESS. SEE FLOOR PLAN AND WALL SECTIONS, PAINT FRAME.
- SEE WALL TYPES FOR WALL WIDTH AND STUD SIZE.
- FRAME DEPTH SHALL BE WALL WIDTH PLUS 1".
- LINE OF WALL, AS OCCURS.
- PROVIDE DOUBLE METAL STUDS AT FRAME JAMBS, WALL ENDS, ETC. PROVIDE STEEL STRAPS (6" HIGH 16 GAUGE STRAPS AT 2'-0" O.C.) SEE DETAIL 7/A502A.
- DOOR HINGE AS OCCURS. SEE DOOR AND HARDWARE SCHEDULE. SEE FLOOR PLAN FOR DOOR SWING.



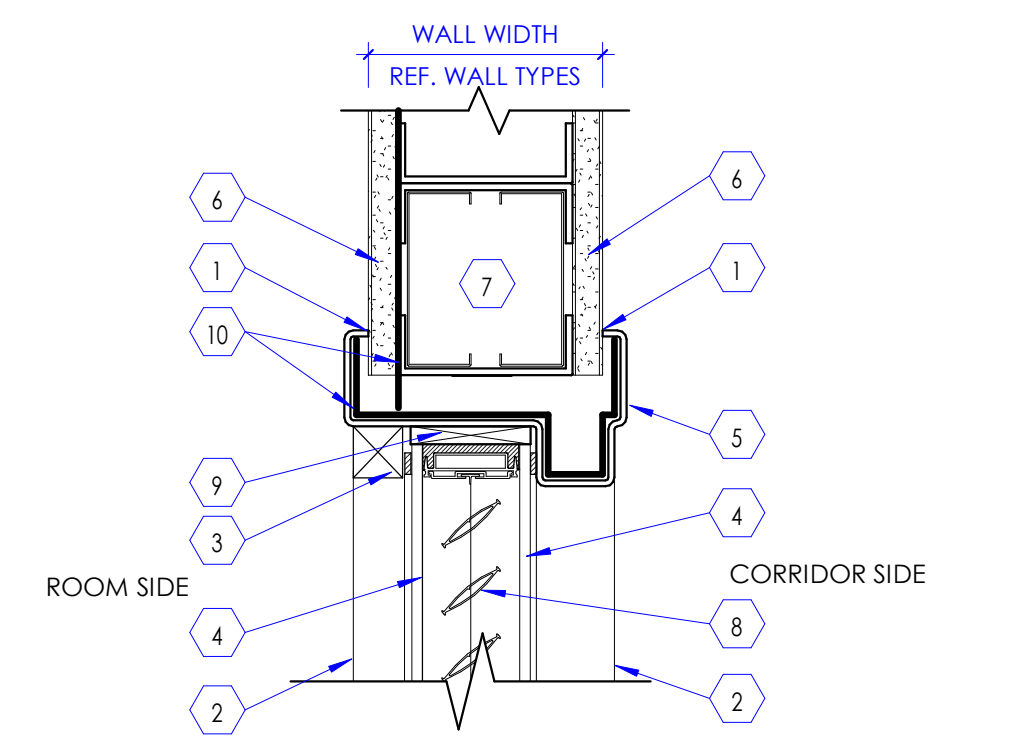
JAMB DETAIL - PLAN VIEW

3 Door Frame in Stud Wall

SCALE: 3" = 1'-0"

KEYED NOTES

- CONTINUOUS SEALANT ON BOTH SIDES OF THE FRAME.
- WINDOW FRAME SEEN BEYOND.
- WINDOW GLAZING STOP, REMOVABLE, 1" X 1" X 1/4". STOPS SHALL BE LOCATED ON THE MORE SECURE ROOM SIDE (AS OPPOSED TO THE LESS SECURE CORRIDOR SIDE). COORDINATE WITH ARCHITECT FOR LESS AND MORE SECURE AREAS THAT ARE NOT APPARENT IN FLOOR PLAN.
- GLAZING, TEMPERED, CLEAR, 1/4" THICK, TYPICAL U.N.O.
- HOLLOW METAL FRAME WITH LEAD LINING AS REQUIRED.
- GYPSUM BOARD, 5/8" THICK, TYPE 'X', TYPICAL, WITH LEAD LINING AS REQUIRED. ATTACH TO METAL STUDS. SEE WALL TYPES.
- WINDOW HEAD FRAMING, SEE DETAIL 11/A502A.
- INSULATED GLAZING UNIT WITH GLAZING UNIT WITH OPERABLE LOUVERS, BASIS OF DESIGN: VISION CONTROL GLAZING BY UNICELL ARCHITECTURAL CORP. TRADE NAME - VISION CONTROL. SEE PROJECT MANUAL FOR DETAILS. THIS WHOLE ASSEMBLY SHALL BE MANUFACTURED BY UNICELL ARCHITECTURAL CORP.
- WOOD SHIM AS REQUIRED.
- LEAD LINING AS REQUIRED.



7 Window Frame - Head Detail

SCALE: 3" = 1'-0"

| FINISH SCHEDULE | | | | | | | |
|-----------------|-------------------------|------------------|--|------------------------------|------------------------------|---------|------------------|
| TAG | FINISH TYPE | SIZE | MATERIAL DESCRIPTION | MANUFACTURER | STYLE | MODEL # | COLOR |
| F1 | FLOOR FINISH | | SHEET VINYL | TARKETT | IQ OPTIMA | 807 | DARK SAND |
| F2 | FLOOR FINISH | | LUXURY VINYL TILE - MATCH EXISTING | MANNINGTON COMMERCIAL | - | - | - |
| F4 | FLOOR FINISH | 18" X 36" | CARPET TILE | SHAW CONTRACT | STIPPLE TILE | ST1 16 | SLATE 13585 |
| F5 | FLOOR FINISH | | SHEET VINYL - MATCH EXISTING | MANNINGTON COMMERCIAL | BIOSPEC MD | - | - |
| B1 | WALL BASE | 4" HIGH | COVED SHEET VINYL | TARKETT | IQ OPTIMA | 807 | DARK SAND |
| B2 | WALL BASE | | COVED SHEET VINYL - MATCH EXISTING | MANNINGTON COMMERCIAL | BIOSPEC MD | - | - |
| B3 | WALL BASE | 4" HIGH | RUBBER BASE | ROPPE | PINNACLE | - | 178 PEWTER |
| B5 | WALL BASE | | RUBBER BASE - MATCH EXISTING | ROPPE | PINNACLE | - | - |
| B6 | WALL BASE | 6" HIGH | COVED SHEET VINYL | TARKETT | IQ OPTIMA | 807 | DARK SAND |
| W1 | WALL FINISH | | PAINT | SHERWIN WILLAIMS | EGGSHELL FINISH | SW 7005 | PURE WHITE |
| W2 | WALL FINISH | | PAINT - MATCH EXISTING | SHERWIN WILLAIMS | EGGSHELL FINISH | - | - |
| W3 | WALL FINISH | | PAINT - EPOXY | SHERWIN WILLAIMS | - | SW 7005 | PURE WHITE |
| C1 | CEILING FINISH | | PAINTED GYPSUM CEILING | SHERWIN WILLAIMS | FLAT FINISH | SW 7005 | PURE WHITE |
| C2 | CEILING FINISH | 24" X 48" | ACOUSTICAL CEILING TILES AND GRID - MATCH EXISTING | ARMSTRONG CEILING SOLUTIONS | ULTIMA HEALTH ZONE | 1938 | - |
| MS1 | MISC. SURFACE FINISH | | PAINTED HOLLOW METAL DOOR FRAMES - MATCH EXISTING | SHERWIN WILLAIMS | SEMI-GLOSS FINISH | - | - |
| PL1 | PLASTIC LAMINATE FINISH | | PLASTIC LAMINATE SHEET OVER SUBSTRATE | LAMINART | MATTE FINISH | 3056 | MYSTIC WOOD |
| MM1 | MONOLITHIC MATERIAL | | SOLID SURFACE | CORIAN | SOLID SURFACE | - | NEUTRAL CONCRETE |
| WP1 | WALL PROTECTION | 0.040" THICKNESS | WAINSCOT PANEL | INPRO ARCHITECTURAL PRODUCTS | PALLADIUM RIGID SHEET | 0103 | WHITE SAND |
| WP2 | WALL PROTECTION | 3" LEGS | CORNER GUARDS | INPRO ARCHITECTURAL PRODUCTS | 150 HIGH IMPACT CORNER GUARD | 0103 | WHITE SAND |

COMMENTS

1. MATCH EXISTING FINISH STYLE AND COLOR. CONTRACTOR TO FIELD VERIFY.
2. CARPET TILE TO BE INSTALLED IN AN ASHLAR PATTERN.
3. WAINSCOT PANEL TO SPAN FROM TOP OF WALL BASE TO 4'-4" A.F.F. AND ALIGN WITH TOP OF CORNER GUARDS WHERE OCCURS. DO NOT USE TRIM WITH WAINSCOT PANEL WALL PROTECTION. SEAL EXPOSED EDGES WITH A THIN BEAD OF CAULK.
4. CORNER GUARDS TO SPAN FROM TOP OF WALL BASE TO 4'-4" A.F.F. AND ALIGN WITH TOP OF WAINSCOT PANEL WHERE OCCURS.
5. ALL CEILING FINISH TAGS ARE LOCATED ON REFLECTED CEILING PLANS.

GENERAL NOTES

- A. BASIS-OF-DESIGN FOR FINISHES: FINISHES INDICATED ON THE FINISH SCHEDULE ARE BASED ON THE NAMED MANUFACTURER AND THEIR PRODUCTS. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE THE NAMED PRODUCT OR A COMPARABLE PRODUCT BY ONE OF THE APPROVED MANUFACTURERS LISTED IN THE PROJECT MANUAL. SEE RELEVANT SPECIFICATION SECTION.
- B. SEE "SAMPLE LAYOUTS" INDICATED ON FINISH PLANS FOR CLARIFICATION ON HOW DIFFERENT TYPES OF REQUIRED FINISHES ARE INDICATED WITH FINISH TAGS FOR FLOORS, WALLS, MISCELLANEOUS SURFACE, ETC. SEE FINISH FLOOR PLANS FOR REQUIRED FINISHES (INDICATED WITH FINISH TAGS SUCH AS F1, B1, W1, ETC.).
- C. LINE OF TRANSITION BETWEEN DIFFERENT TYPES OF FLOOR COVERING IS INDICATED ON THE FINISH FLOOR PLANS. IN PLACES WHERE TWO DIFFERENT FLOOR COVERINGS ABUT EACH OTHER, CONTRACTOR SHALL FOLLOW THE RELEVANT APPLICABLE "FLOOR COVERING TRANSITION DETAILS" INDICATED IN THIS CONSTRUCTION DOCUMENTS, WHERE TWO ROOMS ARE REQUIRED TO HAVE DIFFERENT FLOOR COVERINGS, LINE OF TRANSITION SHALL TYPICALLY OCCUR BELOW THE CENTER OF THE DOOR (LOCATED BETWEEN THE TWO ROOMS). AS THESE TRANSITION LINES ARE NOT INDICATED BELOW THE DOOR ON THE FINISH FLOOR PLANS, CONTRACTOR SHALL PROVIDE METAL TRANSITION STRIP (MANUFACTURED BY SCHLUTER OR EQUIVALENT) AS REQUIRED. AT EXTERIOR DOORS, PROVIDE ALUMINUM THRESHOLD MATCHING THE DOORWAY. FOR REMODEL PROJECTS, COORDINATE WITH DEMOLITION FLOOR PLAN AND NEW FLOOR PLAN TO DETERMINE WHERE NEW ABUTS EXISTING FLOOR COVERING THAT IS SCHEDULED TO REMAIN.
- D. LINE OF TRANSITION BETWEEN DIFFERENT TYPES OF WALL FINISH IS INDICATED ON THE INTERIOR ELEVATIONS AND FINISH FLOOR PLANS. FOR REQUIRED WALL PROTECTION TYPE (INDICATED WITH TAG WP1, WP2, ETC.), ON WALLS, COORDINATE WITH FINISH FLOOR PLANS AND INTERIOR ELEVATIONS.
- E. THERE ARE MISCELLANEOUS SURFACES THAT ARE EXPOSED AND WILL REQUIRE A FINISH. SUCH MISCELLANEOUS SURFACES ARE INDICATED IN THE DRAWINGS WITH FINISH TAGS SUCH AS MS1, MS2, ETC.
- F. PAINT ALL EXPOSED VISIBLE ITEMS SUCH AS METAL DECK, STEEL ANGLES, STEEL BEAMS, STEEL TRUSSES, MISC. STEEL ITEMS, PIPES, CONDUITS, ETC., UNLESS SPECIFICALLY NOTED AS A SURFACE NOT TO BE PAINTED. OR IF NATURAL FINISH IS REQUIRED. PAINT SURFACES USING FIELD COLORS AND ACCENT COLORS SPECIFIED BY THE ARCHITECT. DO NOT PAINT CONCEALED SURFACES, FINISHED METAL SURFACES, OPERATING PARTS, AND PRE-FINISHED ITEMS. VERIFY PAINTING SURFACE (SUCH AS STEEL, CONCRETE, MASONRY, GYPSUM BOARD, WOOD, ETC.) AND USE THE APPROPRIATE PAINT AND METHOD INDICATED IN THE PROJECT MANUAL UNDER RELEVANT SPECIFICATION SECTION. ALL HOLLOW METAL DOOR AND WINDOW FRAMES SHALL BE PAINTED. USE SEMI-GLOSS FINISH ON DOOR FRAMES.
- G. IN ROOMS AND AREAS WHERE GYPSUM BOARD CEILING IS INDICATED, PAINT CEILING WITH THE SAME COLOR AND TYPE AS ADJACENT WALLS. IN WET ROOMS (LIKE RESTROOM, KITCHEN, ETC.) WHERE EPOXY PAINT IS INDICATED AS A REQUIREMENT ON WALLS, PAINT CEILINGS AND SOFFITS WITH EPOXY TYPE PAINT. ALL GYPSUM BOARD SOFFITS SHALL BE PAINTED. COORDINATE ACCENT COLOR LOCATIONS WITH ARCHITECT WHEREVER INDICATED.
- H. SEE INTERIOR ELEVATIONS FOR PLASTIC LAMINATE FINISHES OVER CABINETS, COUNTERTOPS, WALLS, ETC. PLASTIC LAMINATE FINISHES ARE INDICATED AS PL1, PL2, ETC. COUNTERTOPS THAT ARE MONOLITHIC MATERIAL (SUCH AS SOLID SURFACE, QUARTZ, ETC. AND NOT PLASTIC LAMINATE WRAPPED), ARE INDICATED AS MM1, MM2, ETC.
- I. WHERE PORCELAIN AND/OR CERAMIC TILE FINISHES ARE INDICATED, PROVIDE METAL EDGE STRIPS (MANUFACTURED BY SCHLUTER OR EQUIVALENT) AT ALL OUTSIDE VERTICAL CORNERS AND TOP OF WAINSCOT.
- J. IN ROOMS AND AREAS (SUCH AS TOILET ROOMS, SHOWERS, ETC.) WHERE CERAMIC OR PORCELAIN TILES ARE INDICATED FOR WALL AND FLOOR FINISH, INSTALL BOTTOM ROW OF WALL TILE FIRST PER DETAIL 1/A603B. PROVIDE QUARTZ THRESHOLD AT DOORS TO TOILET ROOMS THAT ARE USED BY MULTIPLE USERS. SEE DETAILS 3 & 4 SHEET A603B.
- K. WHERE GYPSUM BOARD WALL ABUTS MASONRY WALL, PROVIDE REVEAL AS PER DETAIL 2/A603B.

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SELVAM
RAJAVELU
267857-0301
LICENSED ARCHITECT

KEYED NOTES

- CARPET FLOOR COVERING AS OCCURS. SEE FINISH SCHEDULE.
- LINE OF FLOOR.
- DOOR AS OCCURS.
- LIQUID APPLIED FINISH (OPAQUE SEALER, CLEAR SEALER, ETC.). SEE FINISH SCHEDULE.
- METAL TRANSITION STRIP, MODEL NUMBER LVT 160 IN ETCHED ALUMINUM BY FUTURA OR EQUIVALENT. ATTACH TRANSITION STRIP TO SUBSTRATE PER MANUFACTURERS RECOMMENDATIONS.
- CENTERLINE OF DOOR AND TRANSITION STRIP SHALL ALIGN.

FINISH SUBSTRATE
(CONCRETE, GYPCRETE, WOOD)

TO

CARPET FLOOR COVERING
(CARPET TILE, BROADLOOM, WALK OFF MAT)

1 Floor Covering Transition Detail

SCALE: 1/2" = 1'-0"

KEYED NOTES

- CARPET FLOOR COVERING AS OCCURS. SEE FINISH SCHEDULE.
- LINE OF FLOOR.
- DOOR AS OCCURS.
- FLOOR COVERING (VINYL COMPOSITION TILE, LUXURY VINYL TILE, ETC. AS OCCURS). SEE FINISH SCHEDULE.
- METAL TRANSITION STRIP, MODEL NUMBER LVT 130 IN ETCHED ALUMINUM BY FUTURA OR EQUIVALENT. ATTACH TRANSITION STRIP TO SUBSTRATE PER MANUFACTURERS RECOMMENDATIONS.
- CENTERLINE OF DOOR AND TRANSITION STRIP SHALL ALIGN.

RESILIENT FLOOR COVERING
(VCT, LVT)

TO

CARPET FLOOR COVERING
(CARPET TILE, BROADLOOM, WALK OFF MAT)

2 Floor Covering Transition Detail

SCALE: 1/2" = 1'-0"

KEYED NOTES

- FLOOR COVERING (VINYL COMPOSITION TILE, LUXURY VINYL TILE, ETC. AS OCCURS). SEE FINISH SCHEDULE.
- LINE OF FLOOR.
- DOOR AS OCCURS.
- LIQUID APPLIED FINISH (OPAQUE SEALER, CLEAR SEALER, ETC.). SEE FINISH SCHEDULE.
- METAL TRANSITION STRIP, MODEL NUMBER LVT 405 IN ETCHED ALUMINUM BY FUTURA OR EQUIVALENT. ATTACH TRANSITION STRIP TO SUBSTRATE PER MANUFACTURERS RECOMMENDATIONS.
- CENTERLINE OF DOOR AND TRANSITION STRIP SHALL ALIGN.

RESILIENT FLOOR COVERING
(VCT, LVT)

TO

FINISH SUBSTRATE
(CONCRETE, GYPCRETE, WOOD)

3 Floor Covering Transition Detail

SCALE: 1/2" = 1'-0"

KEYED NOTES

- CARPET FLOOR COVERING AS OCCURS. SEE FINISH SCHEDULE.
- LINE OF FLOOR.
- DOOR AS OCCURS.
- CERAMIC, PORCELAIN TILE, ETC. ON THINSET MORTAR BED. SEE FINISH SCHEDULE.
- METAL TRANSITION STRIP, EDGETEK SERIES IN ALUMINUM BY FUTURA OR EQUIVALENT. ATTACH TRANSITION STRIP TO SUBSTRATE PER MANUFACTURERS RECOMMENDATIONS.
- CENTER LINE OF DOOR AND TRANSITION STRIP SHALL ALIGN.

TILE FLOOR COVERING
(CERAMIC, PORCELAIN)

TO

CARPET FLOOR COVERING
(CARPET TILE, BROADLOOM, WALK OFF MAT)

4 Floor Covering Transition Detail

SCALE: 1/2" = 1'-0"

KEYED NOTES

- CERAMIC, PORCELAIN TILE, ETC. ON THINSET MORTAR BED. SEE FINISH SCHEDULE.
- LINE OF FLOOR.
- DOOR AS OCCURS.
- LIQUID APPLIED FINISH (OPAQUE SEALER, CLEAR SEALER, ETC.). SEE FINISH SCHEDULE.
- METAL TRANSITION STRIP, EDGETEK SERIES IN ALUMINUM BY FUTURA OR EQUIVALENT. ATTACH TRANSITION STRIP TO SUBSTRATE PER MANUFACTURERS RECOMMENDATIONS.
- CENTERLINE OF DOOR AND TRANSITION STRIP SHALL ALIGN.

TILE FLOOR COVERING
(CERAMIC, PORCELAIN)

TO

FINISH SUBSTRATE
(CONCRETE, GYPCRETE, WOOD)

5 Floor Covering Transition Detail

SCALE: 1/2" = 1'-0"

KEYED NOTES

- CERAMIC, PORCELAIN TILE, ETC. ON THINSET MORTAR BED. SEE FINISH SCHEDULE.
- LINE OF FLOOR.
- DOOR AS OCCURS.
- RESILIENT FLOORING (VINYL COMPOSITION TILE, LUXURY VINYL TILE, AS OCCURS). SEE FINISH SCHEDULE.
- METAL TRANSITION STRIP, EDGETEK SERIES IN ALUMINUM BY FUTURA OR EQUIVALENT. ATTACH TRANSITION STRIP TO SUBSTRATE PER MANUFACTURERS RECOMMENDATIONS.
- CENTERLINE OF DOOR AND TRANSITION STRIP SHALL ALIGN.

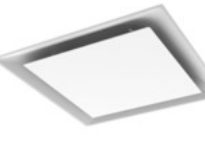
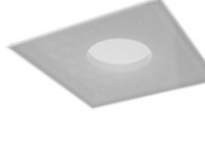
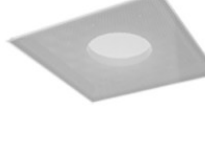


TILE FLOOR COVERING
(CERAMIC, PORCELAIN)

TO

RESILIENT FLOOR COVERING
(VCT, LVT)

6 Floor Covering Transition Detail

SCALE: 1/2" = 1'-0"

| Grille, Register, and Diffuser Schedule | | | | | |
|---|------------------------|-------|--|--|--|
| ID | Manufacturer and Model | Count | Description | Image | |
| CD1 | TITUS DM1 | 20 | STYLE: SQUARE PLAQUE FACE CEILING DIFFUSER CONSTRUCTION: STEEL FINISH: POWDER COAT WITH COLOR SELECTED BY ARCHITECT MOUNTING: SURFACE OR LAY-IN BASED ON CEILING TYPE. PROVIDE FRAME TYPE 1 FOR SURFACE MOUNT AND FRAME TYPE 3 FOR LAY-IN. FACE SIZE: 24"x24", 24"x30", OR 12"x12". VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. CORE: REMOVABLE MAX. NC: 25 DAMPER: NONE CONNECTION: ROUND OR RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: VARIABLE AIR VOLUME SUPPLY |  | |
| CD2 | PRICE ULFO-HEPA-LED | 4 | 72"x24" LAMINAR FLOW DIFFUSER WITH INTEGRAL LIGHTS. ALUMINUM FACE/FRAM WITH WHITE ANTIMICROBIAL EPOXY POWDERCOAT FINISH. ROOM SIDE ADJUSTABLE DDC: DAMPER WITH 51% PERFORATED COLLAR. DIFFUSER FACE SECURED WITH QUARTER TURN FASTENERS. ALL WELDED PLENUM SEAMS. ROOM SIDE ACCESSIBLE LED DRIVER BOX. PROVIDE WITH HEPA FILTERS. FACE TO MATCH ARCHITECTURAL DIFFUSER LAYOUT. PROVIDE WITH NECK SIZE AS SHOWN ON DRAWINGS. | | |
| CD3 | PRICE ULFO-HEPA-LED | 2 | 24"x24" LAMINAR FLOW DIFFUSER WITH INTEGRAL LIGHTS. ALUMINUM FACE/FRAM WITH WHITE ANTIMICROBIAL EPOXY POWDERCOAT FINISH. ROOM SIDE ADJUSTABLE DDC: DAMPER WITH 51% PERFORATED COLLAR. DIFFUSER FACE SECURED WITH QUARTER TURN FASTENERS. ALL WELDED PLENUM SEAMS. ROOM SIDE ACCESSIBLE LED DRIVER BOX. PROVIDE WITH HEPA FILTERS. FACE TO MATCH ARCHITECTURAL DIFFUSER LAYOUT. PROVIDE WITH NECK SIZE AS SHOWN ON DRAWINGS. | | |
| CD4 | PRICE ULFO-HEPA-LED | 6 | 48"x24" LAMINAR FLOW DIFFUSER WITH INTEGRAL LIGHTS. ALUMINUM FACE/FRAM WITH WHITE ANTIMICROBIAL EPOXY POWDERCOAT FINISH. ROOM SIDE ADJUSTABLE DDC: DAMPER WITH 51% PERFORATED COLLAR. DIFFUSER FACE SECURED WITH QUARTER TURN FASTENERS. ALL WELDED PLENUM SEAMS. ROOM SIDE ACCESSIBLE LED DRIVER BOX. PROVIDE WITH HEPA FILTERS. FACE TO MATCH ARCHITECTURAL DIFFUSER LAYOUT. PROVIDE WITH NECK SIZE AS SHOWN ON DRAWINGS. | | |
| RG1 | TITUS PAR | 1 | STYLE: SQUARE PERFORATED FACE CEILING GRILLE CONSTRUCTION: STEEL FINISH: SELECTED BY ARCHITECT MOUNTING: SURFACE OR LAY-IN BASED ON CEILING TYPE. PROVIDE FRAME TYPE 1 FOR SURFACE MOUNT AND FRAME TYPE 3 FOR LAY-IN. FACE SIZE: 48"x24", 24"x24", 24"x12", 20"x20", 16"x16", OR 12"x12" AS SHOWN ON PLANS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. MAX. NC: 25 DAMPER: NONE CONNECTION: ROUND OR RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: EXHAUST OR RELIEF MINIMUM FREE AREA: 50% |  | |
| RG1 | TITUS PAR | 7 | STYLE: SQUARE PERFORATED FACE CEILING GRILLE CONSTRUCTION: STEEL FINISH: SELECTED BY ARCHITECT MOUNTING: SURFACE OR LAY-IN BASED ON CEILING TYPE. PROVIDE FRAME TYPE 1 FOR SURFACE MOUNT AND FRAME TYPE 3 FOR LAY-IN. FACE SIZE: 48"x24", 24"x24", 24"x12", 20"x20", 16"x16", OR 12"x12" AS SHOWN ON PLANS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. MAX. NC: 25 DAMPER: NONE CONNECTION: ROUND OR RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: RETURN OR TRANSFER MINIMUM FREE AREA: 50% |  | |
| SWR1 | TITUS 350 | 2 | STYLE: LOUVERED FACE SIDEWALL GRILLE CONSTRUCTION: STEEL, HEAVY DUTY FINISH: POWDER COAT WITH COLOR SELECTED BY ARCHITECT MOUNTING: SURFACE MOUNT FACE SIZE: SEE PLANS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. CORE: REMOVABLE MAX. NC: 25 DAMPER: NONE CONNECTION: RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: RETURN VANES/BLADES: 3/4" SPACING, 35 DEG DEFLECTION, SINGLE BLADE, BLADES PARALLEL TO FLOOR. MINIMUM FREE AREA: 50% |  | |
| SWR2 | TITUS 350RL-SS | 4 | STYLE: LOUVERED FACE SIDEWALL GRILLE CONSTRUCTION: STAINLESS STEEL, HEAVY DUTY FINISH: POWDER COAT WITH COLOR SELECTED BY ARCHITECT MOUNTING: SURFACE MOUNT FACE SIZE: SEE PLANS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. CORE: REMOVABLE MAX. NC: 25 DAMPER: NONE CONNECTION: RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: RETURN VANES/BLADES: 3/4" SPACING, 35 DEG DEFLECTION, SINGLE BLADE, BLADES PARALLEL TO FLOOR. MINIMUM FREE AREA: 50% |  | |

| FAN SCHEDULE | | | | | | | | | | | | | | |
|-------------------------------|----------|--------|----------|----------------------------|-----------------------------|-----------------------|-----------------|-------------------------|-----------------------|-----------------|----------------|-------------|--------------------------|-------------------------------------|
| MANUFACTURER AND MODEL NUMBER | | | | | FAN | | | | | ELECTRICAL | | | | |
| ID | LOCATION | TYPE | AIR TYPE | MAXIMUM AIRFLOW RATE (CFM) | STATIC PRESSURE (IN. WATER) | OUTLET VELOCITY (FPM) | FAN SPEED (RPM) | FAN WHEEL DIAMETER (IN) | STATIC EFFICIENCY (%) | MOTOR SIZE (HP) | MOTOR BHP (HP) | VOLTS/PH/Hz | SOUND dBA (INLET/OUTLET) | PHYSICAL LENGTH/ WIDTH/ HEIGHT (IN) |
| SF-1 | CORRIDOR | INLINE | SUPPLY | 4100 | 1.5 | 835 | 1477 | 22.25 | 60 | 3 | 1.6 | 460/3/60 | 68/71 | 30/30/27 |
| RF-1 | CORRIDOR | INLINE | RETURN | 3400 | 0.75 | 692 | 1112 | 22.25 | 60 | 2 | 0.66 | 460/3/60 | 62/65 | 30/30/27 |

- DIRECT DRIVE FANS ONLY; NO BELT DRIVEN FANS ALLOWED
- PROVIDE FAN WITH EC MOTOR
- PROVIDE INLINE FAN WITH SPRING VIBRATION ISOLATORS. FLEX CONNECTIONS ON INLET AND OUTLET, AND THERMAL OVERLOAD PROTECTION
- PROVIDE WITH HUSH DUCT HD-1F60HR ACOUSTICAL SILENCER
- INSTALL FAN WITH DISCONNECT. COORDINATE WITH DIV 26

| AIR CONTROL VALVE SCHEDULE | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-------|-------------------------------|-----------------|-----------------------|-----------------------|------------------------|-------------------|-------------------|---------------------|-----------------|------------------|--|-------|----------------------|-------------------|---------------------|---------|---------------------|-----------------|--------------------|----------------------|----------------|----------------------|-------|
| SUPPLY | | | | | AIR | | | | | | | | | | FLUID | | | | | | | | | |
| AREA SERVED | ID | MANUFACTURER AND MODEL NUMBER | INLET DIA. (IN) | MAXIMUM AIRFLOW (CFM) | MINIMUM AIRFLOW (CFM) | AIRFLOW DRIVING FACTOR | ENTERING | | LEAVING | | S.P. LOSS | | TOTAL | | ENTERING/ LEAVING | | WORKING | MAX. FLUID PRESSURE | | S.P. LOSS | | PIPE SIZE (IN) | 2-WAY OR 3-WAY VALVE | NOTES |
| | | | | | | | TEMP. DB (DEG. F) | TEMP. DB (DEG. F) | AT MAX CFM (IN H2O) | HEAT LOAD (MBH) | FLUID FLOW (GPM) | ENTERING/ LEAVING FLUID TEMP. (DEG. F) | FLUID | FLUID TEMP. (DEG. F) | COIL ID | AT MAX CFM (IN H2O) | | MIN. COIL ROWS | MIN. FINS (FPI) | AIR VELOCITY (FPM) | COIL SIZE W x H (IN) | | | |
| OR 1 | SV-01 | ACCUTROL ATC0000 | 14 | 1680 | 1680 | AIR CHANGE | 52 | 80 | 0.16 | 38.6 | 3.0 | 160/135 | WATER | 2.0 | HC-01 | 0.5 | 2 | 10 | 500 | 26 x 20 | 1/2 | 3-WAY | 14 | |
| OR 2 | SV-02 | ACCUTROL ATC0000 | 14 | 1680 | 1680 | AIR CHANGE | 52 | 80 | 0.16 | 38.6 | 3.0 | 160/135 | WATER | 2.0 | HC-02 | 0.5 | 2 | 10 | 500 | 26 x 20 | 1/2 | 2-WAY | 14 | |
| OR 1 | RV-01 | ACCUTROL ATC0000 | 14 | 1480 | 1480 | -- | -- | -- | 0.12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2-3 | |
| OR 2 | RV-02 | ACCUTROL ATC0000 | 14 | 1480 | 1480 | -- | -- | -- | 0.12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2-3 | |

- ALL CAPACITIES AT 4,500 FT ELEVATION.
- AIR VALVE IS TO BE ACTUATED LOW-PRESSURE PARTIALLY CLOSED VALVE.
- PROVIDE AND INSTALL PRESSURE SENSORS BEFORE AND AFTER AIR VALVE AND REPORT PRESSURE DIFFERENTIAL TO BMS.
- DUCT COIL IS TO BE PIPED IN VAV CONFIGURATION PER VAV DETAIL.

| VAV BOX LEVEL 2 SCHEDULE | | | | | | | | | | | | | | | | | | |
|--------------------------|----------|---------|--------------|------------|-----------------|-----------------|-------------|--------------------------|-------------------------|----------------------|-----------|----------------------------|---------------------------|---------------|----------------|-----------------------------------|-------------|------|
| Existing (E) | ID | Level | Manufacturer | Inlet Size | Cooling Airflow | Heating Airflow | Min Airflow | Entering Air Temperature | Leaving Air Temperature | S.P. Loss at Max CFM | Flow Rate | Entering Water Temperature | Leaving Water Temperature | Working Fluid | Head Loss Feet | Min. Number of Rows/Fins Per Inch | Valve Type | NOTE |
| | VAV 2-01 | Level 2 | TITUS-ESV-3 | 10" | 1,000 CFM | 1,000 CFM | 1,000 CFM | 52 °F | 83 °F | 0.4 | 2.0 GPM | 160 °F | 132 °F | WATER | 0.47 | 2/10 | 2 Way Valve | |
| (E) | VAV 2-02 | Level 2 | TITUS-ESV-3 | 10" | 550 CFM | 550 CFM | 550 CFM | 52 °F | 96 °F | 0.145 | 2.0 GPM | 160 °F | 138 °F | WATER | 0.47 | 2/10 | 2 Way Valve | 1 |
| | VAV 2-04 | Level 2 | TITUS-ESV-3 | 12" | 960 CFM | 960 CFM | 960 CFM | 52 °F | 90 °F | 0.221 | 2.5 GPM | 160 °F | 133 °F | WATER | 0.96 | 2/10 | 2 Way Valve | |
| | VAV 2-05 | Level 2 | TITUS-ESV-3 | 8" | 670 CFM | 670 CFM | 670 CFM | 52 °F | 82 °F | 0.383 | 1.5 GPM | 160 °F | 135 °F | WATER | 0.4775 | 2/10 | 2 Way Valve | |
| | VAV 2-06 | Level 2 | TITUS-ESV-3 | 12" | 1,160 CFM | 1,160 CFM | 1,160 CFM | 52 °F | 86 °F | 0.297 | 2.5 GPM | 160 °F | 131 °F | WATER | 0.96 | 2/10 | 3 Way Valve | |
| (E) | VAV 2-07 | Level 2 | TITUS-ESV-3 | 6" | 200 CFM | 200 CFM | 80 CFM | 52 °F | 102 °F | 0.04 | 1.0 GPM | 160 °F | 141 °F | WATER | 0.12 | 2/10 | 3 Way Valve | 1 |
| | VAV 2-08 | Level 2 | TITUS-ESV-3 | 6" | 210 CFM | 210 CFM | 80 CFM | 52 °F | 101 °F | 0.042 | 1.0 GPM | 160 °F | 141 °F | WATER | 0.12 | 2/10 | 2 Way Valve | |
| | VAV 2-09 | Level 2 | TITUS-ESV-3 | 6" | 260 CFM | 260 CFM | 80 CFM | 52 °F | 98 °F | 0.054 | 1.0 GPM | 160 °F | 140 °F | WATER | 0.12 | 2/10 | 3 Way Valve | |
| | VAV 2-10 | Level 2 | TITUS-ESV-3 | 8" | 600 CFM | 420 CFM | 145 CFM | 52 °F | 92 °F | 0.32 | 1.5 GPM | 160 °F | 139 °F | WATER | 0.4775 | 2/10 | 3 Way Valve | |

1. EXISTING VAV BOX TO BE REUSED. RELOCATE 1-STAT AS SHOWN ON M2100 SERIES DRAWINGS. REUSED VAVS TO BE RELOCATED AS NEEDED TO MAINTAIN SERVICE CLEARANCE.

| VAV BOX LEVEL 2 SCHEDULE - ADD ALT | | | | | | | | | | | | | | | |
|------------------------------------|---------|--------------|------------|-----------------|-----------------|-------------|--------------------------|-------------------------|----------------------|-----------|----------------------------|---------------------------|---------------|----------------|-----------------------------------|
| ID | Level | Manufacturer | Inlet Size | Cooling Airflow | Heating Airflow | Min Airflow | Entering Air Temperature | Leaving Air Temperature | S.P. Loss at Max CFM | Flow Rate | Entering Water Temperature | Leaving Water Temperature | Working Fluid | Head Loss Feet | Min. Number of Rows/Fins Per Inch |
| VAV 2-11 | Level 2 | TITUS-ESV-3 | 6" | 220 CFM | 220 CFM | 80 CFM | 52 °F | 100 °F | 0.044 | 1.0 GPM | 160 °F | 141 °F | WATER | 0.12 | 2/10 |



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Project #: 250777

Intermountain Health
Riverton Hospital
GI - ASC

3741 W 12600 S
Riverton, UT 84065

NJRA Project # 25232.00
100% CD Set Nov. 17, 2025
1. ADD 01 12/23/25
2. ADD 02 1/21/25

MECHANICAL
SCHEDULES

M600

1 ONE-LINE DIAGRAM

SCALE: NTS

EQUIPMENT SCHEDULE

| EQUIPMENT SCHEDULE KEY | | | | | | | | | NOTES: | | | | | | | | | GENERAL NOTES: | | | | | | | | |
|--|-----|-------------|-----------|----|-----|-----|-----|----|--|---------|----------|-------------|---------------|------------------|--------|-------|-----------------------|--|--|--|--|--|--|--|--|--|
| E - DIVISION 26 Q - FURNISHED WITH EQUIPMENT, INSTALLED BY DIV.26 | | | | | | | | | 1. PROVIDE MANUAL STARTER WITH THERMAL OVERLOAD AND RELAY FOR ATC/BAS CONTROL. 2. PROVIDE FUSED DISCONNECT ELEVATOR POWER MODULE WITH SHUNT TRIP. 3. INDOOR UNITS FED FROM OUTDOOR UNIT. PROVIDE DISCONNECTS FOR BOTH. | | | | | | | | | 1. LOCATE ELECTRICAL EQUIPMENT IN ACCESSIBLE LOCATION, SUCH THAT IT IS WITHIN SIGHT OF THE EQUIPMENT IT IS SERVING, AND COMPLIES WITH N.E.C. REQUIRED CLEARANCES. 2. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND SIZE FEEDER, STARTER, DISCONNECT AND OVERCURRENT PROTECTION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OF ACTUAL EQUIPMENT SUPPLIED. 3. ELECTRICAL CONTRACTOR SHALL REVIEW OTHER DIVISION DRAWINGS FOR ANY ADDITIONAL REQUIREMENTS PRIOR TO BID. 4. ELECTRICAL CONTRACTOR SHALL REVIEW OTHER DIVISION SUBMITTALS FOR ANY EQUIPMENT REQUIRING CONNECTION BY ELECTRICAL CONTRACTOR AND COORDINATE ALL REQUIREMENTS PRIOR TO ROUGH-IN. | | | | | | | | |
| LABEL | QTY | DESCRIPTION | LOAD DATA | | | | | | WIRE AND CONDUIT SIZE | OCPD | | DISCONNECT | | MOTOR CONTROLLER | | | NEMA ENCLOSURE RATING | NOTES | | | | | | | | |
| | | | HP | kW | MCA | FLA | V | PH | | DEVICE | FED FROM | PROVIDED BY | DEVICE | PROVIDED BY | DEVICE | SIZES | | | | | | | | | | |
| RF-1 | 1 | RETURN FAN | 2 | - | - | 3.4 | 480 | 3 | 3 #12, #12 GR 0.75" CND | 20/3 CB | | E | 30A/3P FRS-6 | Q | - | - | - | | | | | | | | | |
| SF-1 | 1 | SUPPLY FAN | 3 | - | - | 4.8 | 480 | 3 | 3 #12, #12 GR 0.75" CND | 20/3 CB | | E | 30A/3P FRS-10 | Q | - | - | - | | | | | | | | | |

BRANCH CIRCUIT CONDUCTOR AND CONDUIT SIZING TABLE

| CIRCUIT AMPACITY/VOLTAGE | CIRCUIT LENGTH | CONDUCTOR SIZE (PHASE, NEUTRAL AND GR) | CONDUIT SIZE |
|--------------------------|----------------|--|--------------|
| 20A/120V | 0' - 60' | #12 AWG | 0.75" Ø |
| 20A/120V | 60' - 95' | #10 AWG | 0.75" Ø |
| 20A/120V | 95' - 150' | #8 AWG | 1" Ø |
| 20A/120V | 150' - 240' | #6 AWG | 1.25" Ø |
| 20A/277V | 0' - 140' | #12 AWG | 0.75" Ø |
| 20A/277V | 140' - 220' | #10 AWG | 0.75" Ø |
| 20A/277V | 220' - 350' | #8 AWG | 1" Ø |
| 20A/277V | 350' - 550' | #6 AWG | 1.25" Ø |

NOTES:

1. WIRE SIZING IS BASED ON COPPER CONDUCTORS SUPPLYING A 20A, 120V CIRCUIT AT THE INDICATED VOLTAGE. ASSUMED TO BE 80% LOADED (16A), WITH MAXIMUM VOLTAGE DROP OF 3% AT THE LOAD.

2. DOWN-SIZED WIRE AT DEVICE/LOAD AS REQUIRED AND TERMINATE CONDUCTORS IN A SAFE AND CODE COMPLIANT MANNER.

3. CONDUIT SIZE IS BASED ON A MAXIMUM OF 3 CIRCUITS PER CONDUIT, EACH WITH A SEPARATE NEUTRAL CONDUCTOR.

GENERAL SHEET NOTES

1. PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.
2. REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.
3. ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO ELECTRICAL SPECIFICATIONS FOR REQUIREMENTS.
4. PROVIDE PERFORMANCE TESTING FOR GROUND-FAULT PROTECTION SYSTEMS ON SITE WITH A WRITTEN RECORD OF THIS TEST SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PER NEC 230.95(C).

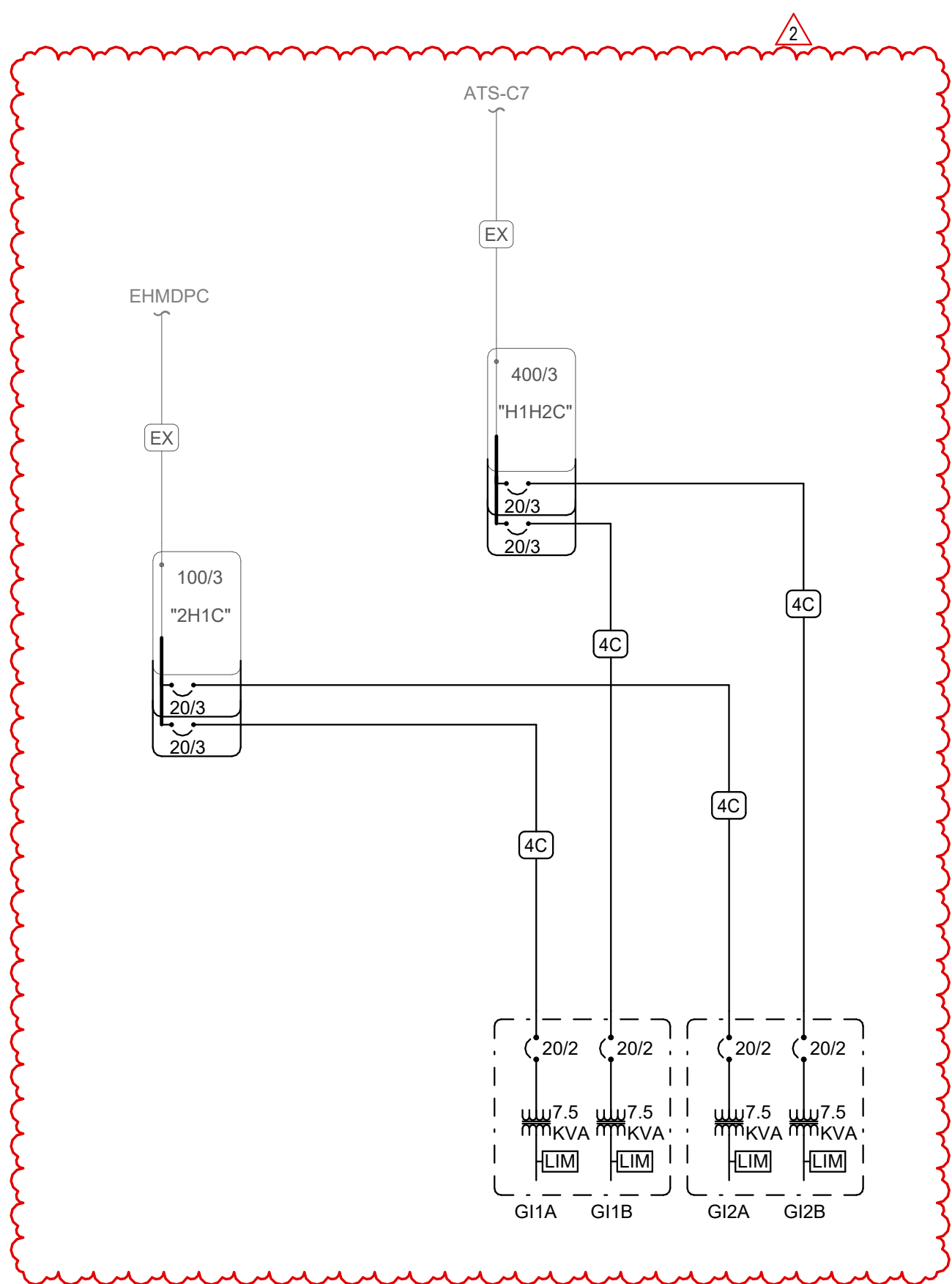
SHEET KEYNOTES

COPPER CONDUCTOR AND CONDUIT SCHEDULE

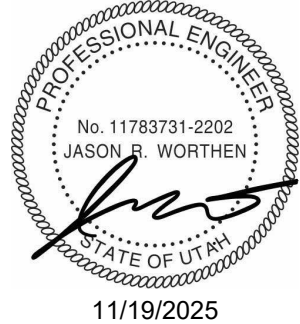
SCHEDULE NUMBER
SUBSCRIPT (NOTE 5)

- CONDUCTOR AND CONDUIT SCHEDULE NOTES
1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.
 2. PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
 3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
 4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
 5. SYMBOL SUBSCRIPTS:
 - "2N": INCLUDE TWO NEUTRAL CONDUCTORS SIZED AS SCHEDULED FOR PHASE AND NEUTRAL CONDUCTORS WHERE THE CONDUCTOR IS #1/0 OR LARGER. INCLUDE A SINGLE 200% RATED CONDUCTOR THAT IS TWICE THE AMPACITY OF THE SCHEDULED PHASE AND NEUTRAL CONDUCTOR WHERE THE CONDUCTOR IS BELOW #1/0 IN SIZE.
 - "CI": PROVIDE CIRCUIT INTEGRITY CABLE. TYPE TWO-HOUR FIRE RESISTIVE CABLES IN CONDUIT OR PROVIDE FEEDER ENCASED IN CONCRETE.
 - "FG": FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE SAME SIZE AS THE PHASE CONDUCTORS.
 - "HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE IGHH SIZE FOR THE EQUIPMENT GROUNDING CONDUCTOR.
 - "IG": INCLUDE IG (INSULATED) ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.
 - "MC": PROVIDE FEEDER IN METAL-CLAD CABLE; TYPE MC IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.
 - "SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.
 - "SER": PROVIDE SERVICE-ENTRANCE CABLE; TYPE SE OR SER IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.
 6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

| SYM | AMP | HH AMPS | CONDUIT SIZE | CONDUCTOR (NOTE 1) | | | IG/HH | SE | NOTES |
|-----|------|---------|--------------|--------------------|------|-----|-------|-----|-------|
| | | | | QTY | SIZE | G | | | |
| 1C | 20 | - | 0.75 | 2 | 12 | 12 | 12 | 8 | 2 |
| 2C | 20 | - | 0.75 | 3 | 12 | 12 | 12 | 8 | 2 |
| 3C | 20 | 24 | 0.75 | 4 | 12 | 12 | 12 | 8 | 2 |
| 4C | 30 | - | 0.75 | 2 | 10 | 10 | 10 | 8 | 2 |
| 5C | 30 | - | 0.75 | 3 | 10 | 10 | 10 | 8 | 2 |
| 6C | 30 | 32 | 0.75 | 4 | 10 | 10 | 10 | 8 | 2 |
| 7C | 40 | - | 1 | 2 | 8 | 10 | 8 | 6 | 2 |
| 8C | 40 | - | 1 | 3 | 8 | 10 | 8 | 6 | 2 |
| 9C | 40 | 44 | 1 | 4 | 8 | 10 | 8 | 6 | 2 |
| 10C | 55 | - | 1 | 2 | 6 | 10 | 8 | 4 | 2 |
| 11C | 55 | - | 1 | 3 | 6 | 10 | 8 | 4 | 2 |
| 12C | 55 | 60 | 1.25 | 4 | 6 | 10 | 8 | 4 | 2 |
| 13C | 70 | - | 1 | 2 | 4 | 8 | 4 | 2 | 2 |
| 14C | 70 | - | 1.25 | 3 | 4 | 8 | 4 | 2 | 2 |
| 15C | 70 | 76 | 1.25 | 4 | 4 | 8 | 4 | 2 | 2 |
| 16C | 85 | - | 1.25 | 2 | 3 | 8 | 3 | 2 | 2 |
| 17C | 85 | - | 1.25 | 3 | 3 | 8 | 3 | 2 | 2 |
| 18C | 85 | 92 | 1.25 | 4 | 3 | 8 | 3 | 2 | 2 |
| 19C | 95 | - | 1.25 | 3 | 2 | 8 | 2 | 2 | 2 |
| 20C | 95 | 104 | 1.5 | 4 | 2 | 8 | 2 | 2 | 2 |
| 21C | 130 | - | 1.5 | 3 | 1 | 6 | 2 | 2 | 2 |
| 22C | 130 | 116 | 1.5 | 4 | 1 | 6 | 2 | 2 | 2 |
| 23C | 150 | - | 2 | 3 | 1/0 | 6 | 2 | 1/0 | 2 |
| 24C | 150 | 138 | 2 | 4 | 1/0 | 6 | 2 | 1/0 | 2 |
| 28C | 200 | 180 | 2.5 | 4 | 3/0 | 6 | 2 | 2/0 | 2 |
| 29C | 230 | - | 2.5 | 3 | 4/0 | 4 | 2 | 2/0 | 2 |
| 30C | 230 | 208 | 2.5 | 4 | 4/0 | 4 | 2 | 2/0 | 2 |
| 34C | 310 | 280 | 3 | 4 | 350 | 3 | 1/0 | 3/0 | 2 |
| 35C | 380 | - | 3.5 | 3 | 500 | 3 | 3/0 | 3/0 | 2 |
| 37C | 400 | - | 2 EA 2 | 3 | 3/0 | 3 | 3/0 | 3/0 | 2 |
| 38C | 400 | 360 | 2 EA 2.5 | 4 | 3/0 | 3 | 3/0 | 3/0 | 2 |
| 42C | 620 | 560 | 2 EA 3 | 4 | 350 | 1/0 | 4/0 | 3/0 | 2 |
| 52C | 1240 | 1120 | 4 EA 3 | 4 | 350 | 3/0 | 4/0 | 3/0 | 4 |



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NJRA Project # 25232.00
Construction Documents Nov. 19, 2025
2 Addendum #2 01/26/25

ONE-LINE
DIAGRAM

EP601

SECTION 08 7100

DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. **This Section includes** items known commercially as finish or door hardware that are required for swing, sliding, and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed.
- B. This **Section includes** the following:
 - 1. Butt hinges
 - 2. Continuous hinges
 - 3. Lock cylinders and keys
 - 4. Lock and latch sets
 - 5. Exit devices
 - 6. Closers
 - 7. Overhead holders
 - 8. Overhead stops
 - 9. Door trim units
 - 10. Auto operators
 - 11. ADA bollard with provision for card reader.
- C. **Related Sections:** The following Sections contain requirements that relate to this Section:
 - 1. **Division 8 Section "Steel Doors and Frames"** for silencers integral with hollow metal frames.
 - 2. **Division 8 Section "Flush Wood Doors"** for factory prefabricating and factory pre-machining of doors for door hardware.
 - 3. **Division 8 Section "Flush Wood Doors"** for hardware related to double-acting stainless steel clad doors.
 - 4. **Division 8 Section "Aluminum Entrances and Storefronts"** for aluminum entrance door hardware installation.

1.3 SUBMITTALS

- A. **General:** Submit the following in accordance with Conditions of Contract and Division 1 Specification sections.
- B. **Product Data:** Provide product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
- C. **Hardware Schedule:** Provide a hardware schedule coordinated with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware. Schedules shall be in vertical format, listing each door opening.
 - 1. **Hardware Schedule Content:** Based on hardware indicated, organize schedule into "hardware sets" indicating complete designations of every item required for each door

or opening. Include the following information:

- a. **Type**, style, function, size, and finish of each hardware item.
 - b. **Name** and manufacturer of each item.
 - c. **Fastenings** and other pertinent information.
 - d. **Location** of each hardware set cross-referenced to indications on Drawings both on floor plans and in door and frame schedule.
 - e. **Explanation of all abbreviations**, symbols, and codes contained in schedule.
 - f. **Mounting locations** for hardware.
 - g. **Door and frame** sizes and materials.
 - h. **Keying** information.
 - i. **Wiring diagrams** with theory of operation.
 - j. **Submittal Sequence**: Submit schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work that is critical in the Project construction schedule. Include with schedule the product data, samples, shop drawings of other work affected by door hardware, and other information essential to the coordinated review of schedule.
 - k. **Keying Schedule**: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks has been fulfilled.
 - l. **Electrical Coordination: Provide electrified hardware coordination drawings in order to** coordinate the hardware with the electrical and security subcontractors.
 - m. **Submit catalog cuts** or product data sheets for all scheduled finish hardware.
2. **Samples**: Provide samples of each type of exposed hardware unit in finish indicated and tagged with full description for coordination with schedule. Submit samples prior to submission of final hardware schedule, **if requested** by the Architect.
 - a. **Samples will be returned to the supplier**. Units that are acceptable and remain undamaged through submittal, review, and field comparison process may, after final check of operation, be incorporated in the Work, within limitations of keying coordination requirements.
 3. **Templates**: Provide templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

1.4 ELECTRONIC HARDWARE SYSTEMS

- A. **Provide complete wiring diagrams** prepared by an authorized factory employee for each opening requiring electronic hardware, except openings where only magnetic hold-open devices are specified. Provide a copy with each hardware schedule submitted after approval.
- B. **Provide complete operational descriptions** of electronic components listed by opening in the hardware submittals. Operational descriptions to detail how each electrical component functions within the opening incorporating all conditions of ingress and egress. Provide a copy with each hardware schedule submitted for approval.
- C. **Provide elevation drawings** of electronic hardware and systems identifying locations of the system components with respect to their placement in the door opening. Provide a copy with each hardware schedule submitted for approval.
- D. Prior to installation of electronic hardware, **arrange conference** between supplier, installers and related trades to review materials, procedures and coordinating related work.
- E. **The electrical products contained within this specification represent a complete**

engineered system. If alternate electrical products are submitted, it is the responsibility of the distributor to bear the cost of providing a complete and working system including re-engineering of electrical diagrams and system layout, as well as power supplies, power transfers and all required electrical components. Coordinate with electrical engineer and electrician to ensure that line voltage and low voltage wiring is coordinated to provide a complete and working system.

- F. For each item of electrified hardware specified, **provide standardized molex plug connectors** to accommodate up to twelve (12) wires. Molex plug connectors shall plug directly into through-door wiring harnesses, frame wiring harnesses, electric locking devices and power supplies.
- G. **Integrated wiegand products** shall be supplied only through designated ASSA ABLOY "Authorized Channel Partner" (ACP) distributors. Installation of integrated wiegand products shall be performed by an ASSA ABLOY "Certified Integrator" (CI).

1.5 QUALITY ASSURANCE

- A. **Manufacturer (Single Source Responsibility):** Obtain each type of hardware (latch and lock sets, hinges, etc.) from single manufacturer, although several may be indicated as offering products complying with requirements.
- B. **Supplier Qualifications:** A recognized architectural door finish hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this project and that employs an experienced and full-time Architectural Hardware Consultant (AHC) who is available, at reasonable times during the course of the work, for consultation about project's hardware requirements, to Owner, Architect and Contractor.
- C. **Fire-Rated Openings:** Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by UL, Warnock Hersey, FM, or other testing and inspecting organization acceptable to authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.
 - 1. Project requires door assemblies and components that are compliant with positive pressure and S-label requirements. Specifications must be cross-referenced and coordinated with door manufacturers to ensure that total opening engineering is compatible with UL10C Standard for Positive Pressure Fire Tests of Door Assemblies.
 - a. Hardware required for fire doors shall be listed with Underwriters Laboratories for ratings specified.
 - b. Certification(s) of compliance shall be made available upon request by the Authority Having Jurisdiction.
- D. **Emergency Exit Devices:** Where emergency exit devices are required on fire-rated doors (with supplementary marking on doors with labels indicating "Fire Door to be Equipped with Fire Exit Hardware") provide labels on exit devices indicating "Fire Exit Hardware."
- E. **Hardware Installers** must have a minimum of five (5) years experience in installation of hardware. Provide verification of installer's qualification for approval. All installers to attend review meetings with the hardware distributor.

1.6 PRODUCT HANDLING

- A. **Tag each item** or package separately with identification related to final hardware schedule, and include basic installation instructions with each item or package.
- B. **Packaging of door hardware is responsibility of supplier.** As material is received by hardware supplier from various manufacturers, sort and repackage in containers clearly marked with appropriate hardware set number to match set numbers of approved hardware schedule. Two or more identical sets may be packed in same container. Each package shall be complete, with all necessary screws and accessories. No keys, other than construction master keys or temporary keys are to be packed in boxes with the locks.
- C. **Inventory** door hardware jointly with representatives of hardware supplier and hardware installer until each is satisfied that count is correct.
- D. **Deliver** individually packaged door hardware items promptly to place of installation (shop or Project site).
- E. **Provide secure lock-up** for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items that are not immediately replaceable so that completion of the Work will not be delayed by hardware losses both before and after installation. Any shortage or damaged product shall be made good without cost to the Owner.

1.7 MAINTENANCE

- A. **Maintenance Tools and Instructions:** Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.
- B. Upon completion of construction and building turnover, furnish two (2) complete maintenance manuals to the Owner. Manuals to include the following items:
 - 1. Approved hardware schedule, catalog cuts and keying schedule.
 - 2. Hardware installation and adjustment instructions.
 - 3. Manufacturer's written warranty information.
 - 4. Wiring diagrams, elevation drawings and operational descriptions for all electronic openings.

1.8 PRE-INSTALLATION CONFERENCE

- A. **Pre-installation conference** shall be conducted prior to installation of hardware at Project site. Meet with the Owner, Architect, Contractor, installer, and manufacturers' representatives. Notify participants at least ten (10) working days before conference.
- B. **A separate pre-installation conference** shall be conducted prior to the installation of electronic security hardware with the electrical contractor to review catalogs, brochures, templates, installation instructions, and the approved hardware schedule. Survey installation procedures and workmanship, with special emphasis on unusual conditions, as to ensure correct technique of installation, and coordination with other work. Notify participants at least ten (10) working days before conference.

1.9 WARRANTY

- A. All items, except as noted below, shall be warranted in writing by the manufacturer against failure due to defective materials and workmanship for a minimum period of one (1) year commencing on the date of final completion and acceptance. In the event of product failure, promptly repair or replace item with no additional cost to the Owner.
1. Cylindrical locksets - Heavy Duty: Seven (7) years
 2. Exit Devices: Five (5) years
 3. Door closers: Ten (10) years
 4. Securitron (and approved equals) electrified hardware: Unlimited Lifetime

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Catalog numbers used in the Hardware Schedule were taken from the indicated manufacturers and all finish hardware shall be either the hardware specifically described or an equal product approved by the Architect from the manufacturers listed below as "acceptable manufacturers".
- B. Obtain each type of finish hardware (hinges, latch and locksets, exit devices, etc.) from a single manufacturer.

| HARDWARE | SPECIFIED MFR | ACCEPTABLE MANUFACTURERS |
|-------------------|---------------|--------------------------|
| Butts | McKinney | Stanley, Hager, |
| Continuous hinge | Markar | None |
| Locks | Accentra | None |
| Cylinders | ASSA | None |
| Door Closers | Accentra | None |
| Trims/Kick Plates | Rockwood | McKinney, Trimco |
| Thresholds | Pemko | McKinney, Zero |
| Weather stripping | Pemko | McKinney, Zero |
| Stops | Rockwood | McKinney, Trimco |

- C. Hardware manufacturers shall be those noted here and also as noted in specific product descriptions below.

2.2 SCHEDULED HARDWARE

- A. **Requirements for design**, grade, function, finish, size, and other distinctive qualities of each type of finish hardware are indicated in the "Hardware Schedule" at the end of this Section. Products are identified by using hardware designation numbers of the following:
1. **Manufacturer's Product Designations:** The product designation and name of one manufacturer are listed for each hardware type required for the purpose of establishing minimum requirements. Provide either the product designated or, where more than one manufacturer is specified under the Article "Manufacturers" in Part 2 for each hardware type, the comparable product of one of the other manufacturers that complies with requirements.
 2. **ANSI/BHMA** designations used elsewhere in this Section or in schedules to describe hardware items or to define quality or function are derived from the following standards. Provide products complying with these standards and requirements specified elsewhere in this Section.
 - a. **Butts and Hinges:** ANSI/BHMA A156.1.
 - b. **Bored and Preassembled Locks and Latches:** ANSI/BHMA A156.2.
 - c. **Exit Devices:** ANSI/BHMA A156.3.

- d. **Door Controls - Closers:** ANSI/BHMA A156.4.
- e. **Auxiliary Locks and Associated Products:** ANSI/BHMA A156.5.
- f. **Architectural Door Trim:** ANSI/BHMA A156.6.
- g. **Template Hinge Dimensions:** ANSI/BHMA A156.7.
- h. **Door Controls - Overhead Holders:** ANSI/BHMA A156.8.
- i. **Interconnected Locks and Latches:** ANSI/BHMA A156.12.
- j. **Mortise Locks and Latches:** ANSI/BHMA A156.13.
- k. **Sliding and Folding Door Hardware:** ANSI/BHMA A156.14.
- l. **Closer Holder Release Devices:** ANSI/BHMA A156.15.
- m. **Auxiliary Hardware:** ANSI/BHMA A156.16.
- n. **Self-Closing Hinges and Pivots:** ANSI/BHMA A156.17.
- o. **Materials and Finishes:** ANSI/BHMA A156.18.

2.3 MATERIALS AND FABRICATION

- A. **Manufacturer's Name Plate:** Do not use manufacturers' products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise acceptable to Architect.
 - 1. **Manufacturer's identification** will be permitted on rim of lock cylinders only.
 - 2. **Base Metals:** Produce hardware units of basic metal and forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units by applicable ANSI/BHMA A156 series standards for each type of hardware item and with ANSI/BHMA A156.18 for finish designations indicated. Do not furnish "optional" materials or forming methods for those indicated, except as otherwise specified.
 - 3. **Fasteners:** Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware that has been prepared for self-tapping sheet metal screws, except as specifically indicated.
 - a. **Furnish screws** for installation with each hardware item. Provide Phillips flat-head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.
 - b. **Provide concealed fasteners** for hardware units that are exposed when door is closed except to the extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means of reinforcing the work adequately to fasten the hardware securely. Where thru-bolts are used as a means of reinforcing the work, provide sleeves for each thru-bolt or use sex screw fasteners.

2.4 HINGES, BUTTS, AND PIVOTS

- A. **Templates:** Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- B. **Screws:** Provide Phillips flat-head screws complying with the following requirements:
 - 1. For metal doors and frames install machine screws into drilled and tapped holes.
 - 2. For fire-rated wood doors install #12 x 1-1/4-inch, threaded-to-the-head steel wood screws.
 - 3. Finish screw heads to match surface of hinges or pivots.
- C. **Hinge Pins:** Except as otherwise indicated, provide hinge pins as follows:
 - 1. Out-Swing Exterior Doors: Non-removable pins (NRP).
 - 2. Out-Swing Corridor Doors with Locks: Non-removable pins (NRP).

3. Interior Doors: Non-rising pins.
 4. Tips: Flat button and matching plug, finished to match leaves, except where hospital tip (HT) indicated.
- D. **Number of Hinges:** Provide number of hinges indicated but not less than 3 hinges per door leaf for doors 90 inches or less in height. For doors 90+ to 120 inches high, provide four hinges, for heights of 120+ to 150 inches provide five hinges and so on for each 30 inch increment of height.
1. **Fire-Rated Doors:** Not less than 3 hinges per door leaf for doors 86 inches or less in height with same rule for additional hinges.
- E. **Weight:** All hinges shall be heavy weight type, 0.180 inches.
- F. **Hinges shall conform to ANSI A156.1** and have the number of knuckles specified, oil-impregnated bearings as specified with NRP feature at all exterior reverse bevel doors. Provide hinges in quantity as noted above.
1. Specified Manufacturer: McKinnney
 2. Approved Substitutes: Hager, Stanley

2.6 LOCK CYLINDERS AND KEYING

- A. **Match Existing System:** ASSA
- B. **Keying Schedule:** Review the keying system with the Owner and provide the type required (master, grandmaster or great-grandmaster), integrate with the Owner's existing system.
- C. **Provide cylinders and keys protected** from unauthorized manufacture and distribution by manufacturer's United States patents. The key design and tolerances shall permit the cutting of keys with standard code or duplicating machines. The requirement for a single-purpose or keyway-specific cutting or duplicating machine shall not be allowed. The key design and tolerances shall permit the use of keys and cylinders in existing key systems having similar keyways and sections.
- D. **Cylinders:**
1. Specified Manufacturer: ASSA. System to be integrated with the facility master key system.
 2. Approved Substitute: None.
- E. **Provide interchangeable core cylinders at all exit devices.**
- F. **Metals:** Construct lock cylinder parts from brass or bronze, stainless steel, or nickel silver.
- G. **Master-keying:** Comply with Owner's instructions for master-keying and, except as otherwise indicated, provide individual change key for each lock that is not designated to be keyed alike with a group of related locks.
1. **Permanently inscribe each key** with number of lock that identifies cylinder manufacturer's key symbol, and notation, "**DO NOT DUPLICATE.**"
- H. **Key Material:** Provide keys of nickel silver only.
- I. **Key Quantity:**
1. **Two** (2) change keys per lock
 2. **Three** (3) grand master keys
 3. **Six** (6) master keys per master level

- 4. **Fifteen** (15) construction/temporary keys
- 5. **Five** (5) control keys

- J. Change keys, Master keys and all high-security or restricted keyway blanks shall be sealed in tamper-proof packaged boxes when shipped from the factory. The boxes shall be shrink wrapped and imprinted to ensure the integrity of the packaging.

- L. **Lockset Strikes**
 - 1. Strikes shall be non-handed and available with curved lip, full lip or ASA type strikes as required. Provide strikes with lip-length required to accommodate jamb and trim detail and projection.

2.7 CYLINDER INSTALLATION

- A. The General Contractor shall install all construction cylinders/cores, at the time of hardware installation.

- B. When requested by the Owner or Architect, the General Contractor shall remove all construction cylinders and cores, and install all permanent cylinders and cores. Construction cylinders/cores are to be returned to the hardware supplier.

2.8 LOCKS, LATCHES, AND BOLTS

- A. MORTISE LOCKSETS
 - a. All locksets shall be ANSI 156.13 Series 1000, Grade 1 Certified. All functions shall be manufactured in a single sized case formed from 12 gauge steel minimum. The lockset shall have a field-adjustable, beveled armored front, with a .125" minimum thickness and shall be reversible without opening the lock body. The lockset shall be 2 3/4" backset with a one-piece 3/4" anti-friction stainless steel latchbolt. The deadbolt shall be a full 1" throw made of stainless steel and have 2 hardened steel roller inserts. All strikes shall be non-handed with a curved lip. To insure proper alignment, all trim, shall be thru-bolted and fully interchangeable between rose and escutcheon designs and shall be the product of one manufacturer.
 - 1) Specified Manufacturer: Yale 8800 Series
 - 2) Approved Substitutes: None

- B. **Comply with UL requirements** for throw of bolts and latch bolts on rated fire openings.

- C. **Flush Bolt Heads:** Minimum of 1/2" diameter rods of brass, bronze or stainless steel, with minimum 12" long rod for doors up to 7'-0" in height. Provide longer rods as necessary for doors exceeding 7'-0" in height.

- D. **Provide dust-proof strikes** for foot bolts, except where special threshold construction provides non-recessed strike for bolt.

2.9 CLOSERS AND DOOR CONTROL DEVICES

- A. **Size of Units:** Except as otherwise specifically indicated, comply with the manufacturer's recommendations for size of door control unit, depending upon size of door, exposure to weather and anticipated frequency of use. Maximum projection from surface of door: 2-3/4 inches.

- B. **Closers:** All door closers shall be of one manufacturer to provide for proper installation and servicing after installation. All closers shall be inspected after installation by a factory representative to ensure proper adjustment and operation. Closer shall carry a manufacturer's 10 year warranty for hydraulic units and 2 year warranty for electrical and/or handicap power assist door closers against manufacturing defects and workmanship.
- C. **Cylinder:** Shall be of high strength cast iron construction. All door exterior closers shall be tested to ANSI/BHMA A156.4 , Grade 1 test requirements by a BHMA certified independent testing laboratory. Cylinder shall have been manufactured and in the marketplace for a minimum of 10 years. A list of (10) year old projects using submitted closer shall be available upon request.
- D. **All door closers shall be fully hydraulic** and have full rack and pinion action. Pinion and pistons shall be hardened regardless of closer size. The closer shall incorporate tamper resistant non-critical screw valves of V-slot design to reduce possible clogging. Closer shall have separate and independent screw valve adjustments for latch speed, general speed and hydraulic backcheck. Backcheck shall be properly located so as to effectively slow the swing of the door at a minimum of 10 degrees in advance of the dead stop location.
- E. **All door closers shall pass UL10C** positive pressure fire test.
- F. **Parallel Arm Closers:** Shall incorporate one piece solid forged steel arms, steel stud shoulder bolts incorporated in regular arms, hold open arms, arms with stop built in, arms with hold open and stop built in. All other closers to have forged steel main arms for strength, and durability.
- G. **All closers to have a powder coat finish** on closer body, arm, metal cover and adapter plate. Powder coat finish shall exceed a minimum 100 hour salt spray test, as described in ANSI Standard A156.4 and ASTM B117.
- H. **Hydraulic Fluid:** All closers, with the exception of interior and interior electronic closers, shall utilize temperature stable fluid capable of withstanding temperature ranges of 120 degrees F. to -30F. without requiring seasonal adjustment of closer speed to properly close the door.
- I. **Supply all drop plates**, shoe supports, templates, etc. to properly install closers according to manufacturer's recommendations.
 - 1. **Specified Manufacturer:** Accentra
 - 2. **Approved Substitutes:** Norton
- J. **Closer Mounting:** Mount all closers with **thru bolts** using **sex bolts**. Also mount closers at **180 degree mounting** where door swing can be greater than **90 degrees**.

2.10 DOOR TRIM AND PROTECTIVE PLATES

- A. Kick plates shall be .050 gauges and two (2) inches less than door width on push side and one (1) inch less than door width on pull side; height as specified in headings. Coordinate and provide width required where possible conflicting hardware dictates otherwise. Push plates, pull plates, door pulls and miscellaneous door trim shall be as shown in the hardware schedule.
 - 1. **Specified Manufacturer:** Rockwood
 - 2. **Approved Substitutes:** McKinney, Trimco

2.11 DOOR STOPS AND HOLDERS

A. **Wall Mounted Door Stops**

1. Where a door is indicated on the plans to strike flush against a wall, wall bumpers shall be provided. Provide convex or concave design as indicated.
 - a. **Specified Manufacturer:** Rockwood
 - b. **Approved Substitutes:** McKinney, Trimco

B. **Overhead Stops/Holders**

1. Where specified, overhead stops/holders as shown in the hardware sets are to be provided. Track, slide, arm and jamb bracket shall be constructed of extruded bronze and shock absorber spring shall be of heavy tempered steel. Overhead stops shall be of non-handed design.
 - a. **Specified Manufacturers:** Rixson 9 Series

2.12 DOOR TRIM UNITS

- A. **Fasteners:** Provide manufacturer's standard exposed fasteners for door trim units consisting of either machine screws or self-tapping screws.
- B. **Fabricate protection plates** not more than 2 inches less than door width by height indicated.
 1. **Metal Plates:** Stainless steel, 0.050 inch (U.S. 18 gage).

2.13 WEATHERSTRIPPING AND SEALS

- A. **General:** Provide continuous weatherstripping on exterior doors and smoke, light, or sound seals on interior doors where indicated or scheduled. Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.
- B. **Replaceable Seal Strips:** Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.
- C. **Weatherstripping at Jambs and Heads:** Provide bumper-type resilient insert and metal retainer strips, surface applied unless shown as mortised or semimortised, and of following metal, finish, and resilient bumper material:
 1. **Extruded aluminum** with color anodized finish as selected from manufacturer's standard color range, 0.062-inch minimum thickness of main walls and flanges.
- D. **Weatherstripping at Door Bottoms:** Provide threshold consisting of contact-type resilient insert and metal housing of design and size shown and of following metal, finish, and resilient seal strip:
 1. **Extruded aluminum** with color anodized finish as selected from manufacturer's standard color range, 0.062-inch minimum thickness of main walls and flanges.
 2. **Solid neoprene wiper** or sweep seal complying with MIL R 6855, Class II, Grade 40.

2.14 GASKETING AND THRESHOLDS

- A. Provide continuous weatherseal on exterior doors and smoke, light, or sound seals on interior doors where indicated or scheduled. Provide intumescent seals as required to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies. Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.

- B. Provide threshold units not less than 4" wide, formed to accommodate change in floor elevation where indicated, fabricated to accommodate door hardware and to fit door frames. All threshold units shall comply with the Americans with Disabilities Act (ADA).
 - 1. **Specified Manufacturers:** Pemko
 - 2. **Approved Substitutes:** McKinney, Reese, Zero

2.15 SILENCERS

- A. Furnish rubber door silencers all hollow metal frames; two (2) per pair and three (3) per single door frame.

2.16 HARDWARE FINISHES

- A. **Match items** to the manufacturer's standard color and texture finish for the latch and lock sets (or push-pull units if no latch or lock sets).
- B. **Provide finishes** that match those established by BHMA or, if none established, match the Architect's sample.
- C. **Provide quality of finish**, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
- D. **Provide protective lacquer coating** on all exposed hardware finishes of brass, bronze, and aluminum, except as otherwise indicated.
- E. Where specified hardware shall have an **antimicrobial coating** which permanently suppresses the growth of bacteria, algae, fungus, mold and mildew applied. The finish shall control the spread and growth of bacteria, mold and mildew and shall be FDA listed for use in medical and food preparation equipment.
- F. **The designations used in schedules** and elsewhere to indicate hardware finishes are those listed in **ANSI/BHMA A156.18, "Materials and Finishes,"** including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.
- G. All trim in 626 or US26D dull chrome finish.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. **Install hardware** using only manufacturer supplied and approved fasteners in strict adherence with manufacturers published installation instructions. All hardware shall be applied and installed in accordance with best trade practice by an experienced hardware installer. Care shall be exercised not to mar or damage adjacent work.
- B. **Install head seal** prior to installation of "PA"-parallel arm mounted door closers and push side

mounted door stops/holders.

1. **Trim, cut and notch thresholds** and saddles neatly to minimally fit the profile of the door frame.
 2. **Install thresholds** and saddles in a bed of caulking completely sealing the underside from water and air penetration.
- C. **Counter sink through bolt of door pull** under push plate during installation.
- D. **Mount hardware units at heights indicated** in following applicable publications, except as specifically indicated or required to comply with governing regulations and except as otherwise directed by Architect.
1. **"Recommended Locations for Builders Hardware for Standard Steel Doors and Frames"** by the Door and Hardware Institute.
 2. **"Recommended Locations for Builders Hardware for Custom Steel Doors and Frames"** by the Door and Hardware Institute.
 3. **NWWDA Industry Standard I.S.1.7, "Hardware Locations for Wood Flush Doors."**
 4. **Provide blocking** in drywall partitions where wall stops are to be located.
- E. **Install each hardware item** in compliance with the manufacturer's instructions and recommendations. Where cutting and fitting is required to install hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation or application of surface protection with finishing work specified in the **Division 9** Sections. Do not install surface-mounted items until finishes have been completed on the substrates involved.
1. **Set units level, plumb, and true** to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
 2. **Drill and countersink** units that are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
 3. **Set thresholds** for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements specified in Division 7 Section "Joint Sealers."
 4. **Weather Stripping and Seals:** Comply with manufacturer's instructions and recommendations to the extent installation requirements are not otherwise indicated.
- F. **Boxed Power Supplies:** Locate power supplies as indicated. Verify location with Architect.
1. **Configuration:** Provide the least number of power supplies required to adequately serve doors with electrified door hardware.

3.2 FIELD QUALITY CONTROL

- A. Prior to the installation of hardware, manufacturer's representatives for locksets, closers, and exit devices shall arrange and hold a jobsite meeting to instruct the installing contractor's personnel on the proper installation of their respective products. A letter of compliance, indicating when this meeting is held and who is in attendance, shall be sent to the Architect and Owner.
- B. The hardware supplier shall do a final inspection prior to building completion to ensure that all hardware was correctly installed and is in proper working order.
- C. The manufacturer's representative shall do a final inspection prior to building completion to ensure that all hardware was correctly installed and is in proper working order.

3.3 ADJUSTING, CLEANING, AND DEMONSTRATING

- A. **Adjust and check each operating item** of hardware and each door to ensure proper

operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.

1. **Where door hardware is installed more than one month** prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
 2. **Clean adjacent surfaces** soiled by hardware installation.
 3. **Instruct Owner's personnel** in the proper adjustment and maintenance of door hardware and hardware finishes and usage of any electronic devices.
- B. Keys issued by the Owner to the Contractor shall be returned to the Owner upon Substantial Completion. The Contractor shall be responsible for all costs associated with rekeying the building if all keys are not accounted for and returned to the Owner.

3.4 HARDWARE SCHEDULE

- A. **General:** Provide hardware for each door to comply with requirements of Section "Door Hardware," hardware set numbers indicated in door schedule, and in the following schedule of hardware sets. Hardware sets indicate quantity, item, manufacturer and product designation, size, and finish or color, as applicable.
- B. Provide hardware for aluminum storefront and interior aluminum to ensure all hardware is provided from one source.
1. Aluminum systems hardware provided by 08 7100 and installed by 08 4113.
- C. The following schedule is furnished for whatever assistance it may afford the Contractor; do not consider it as entirely inclusive. Should any particular door or item be omitted in any scheduled hardware heading, provide door or item with hardware same as required for similar purposes. Hardware supplier is responsible for handing and sizing all products as listed in the hardware heading. Quantities listed are for each pair of doors, or for each single door.
- D. Manufacturer's Abbreviations:
1. MC - McKinney
 2. NO - Norton
 3. PE - Pemko
 4. RO - Rockwood
 5. YA - Accentra
 6. SN - Securitron
 7. RE - Record
 8. MA - Markar
 9. RX - Rixson
 10. HS - HES

Set 01.0

Doors: A202A, A204A

| | | | | |
|---|-------------|----------------------|-------|----|
| 3 | Hinges | TA2714 4 1/2 X 4 1/2 | 26D | MC |
| 1 | Passage Set | PBR8801 | 626 | YA |
| 1 | Closer | 4400 | 689 | YA |
| 1 | Wall Stop | 409 | US32D | RO |
| 1 | Silencers | 608 | | RO |

Set 01.1

Doors: A201A

| | | | | |
|---|-------------|----------------------|-------|----|
| 3 | Hinges | TA2714 4 1/2 X 4 1/2 | 26D | MC |
| 1 | Passage Set | PBR8801 – LEAD LINED | 626 | YA |
| 1 | Closer | 4400 | 689 | YA |
| 1 | Wall Stop | 409 | US32D | RO |
| 1 | Silencers | 608 | | RO |

Set 02

Doors: B209A

| | | | | |
|---|------------------|----------|-------|------|
| 1 | Hinge | FM300 | 32D | MC |
| 1 | Storeroom Lock | PBR8805 | 626 | YA |
| 1 | Mortise Cylinder | By Owner | | ASSA |
| 1 | Closer | 4400 | 689 | YA |
| 1 | Wall Stop | 409 | US32D | RO |
| 1 | Smoke Seal | S88 | | PE |

Set 03

Doors: B202A, B202B, B121B, B201A

| | | | | |
|---|------------------|----------------------|-------|------|
| 3 | Hinges | TA2714 4 1/2 x 4 1/2 | 26D | MC |
| 1 | Classroom Lock | PBR8808 | 626 | YA |
| 1 | Mortise Cylinder | By Owner | | ASSA |
| 1 | Closer | 4400 | 689 | YA |
| 1 | Wall Stop | 409 | US32D | RO |
| 1 | Smoke Seal | S88 | | PE |

Set 04.0

Doors: B205A

| | | | | |
|---|-------------|---------|-----|----|
| 1 | Hinge | FM300 | 630 | MA |
| 1 | Passage Set | PBR8801 | 626 | YA |
| 1 | Floor Stop | 441 | 630 | RO |
| 1 | Smoke Seal | S88 | D | PE |

Set 04.1

Doors: B206A

| | | | | |
|---|-------------|----------------------|-----|----|
| 1 | Hinge | FM300 | 630 | MA |
| 1 | Passage Set | PBR8801 – LEAD LINED | 626 | YA |
| 1 | Floor Stop | 441 | 630 | RO |
| 1 | Smoke Seal | S88 | D | PE |

Set 05

Doors: B210A, B211A

| | | | | |
|---|------------------|----------------------|-------|------|
| 3 | Hinges | TA2714 4 1/2 x 4 1/2 | 26D | MC |
| 1 | Entry Lock | PBR8807 | 626 | YA |
| 1 | Mortise Cylinder | By Owner | | ASSA |
| 1 | Wall Stop | 409 | US32D | RO |
| 1 | Silencers | 608 | | RO |

Set 06

Doors: B212A

All Hardware by Door Manufacturer.

Set 07

Doors: B202C

| | | | | |
|---|------------------|--------------------------|-------|------|
| 3 | Hinges | TA2714 4 1/2 x 4 1/2 NRP | 26D | MC |
| 1 | Storeroom Lock | PBR8805 | 626 | YA |
| 1 | Electric Strike | 1600 | 630 | HES |
| 1 | Mortise Cylinder | By Owner | | ASSA |
| 1 | Closer | 4400 | 689 | YA |
| 1 | Wall Stop | 409 | US32D | RO |
| 1 | Smoke Seal | S88 | | PE |

Card Reader, Power Supply, Door Position Switch By Div. 28

Set 08

Doors: B213A

| | | | | |
|---|--------------|----------------|-------|------|
| 1 | Hinge | FM300 | 630 | MA |
| 1 | Exit Device | 7100F x PB626F | 626 | YA |
| 1 | RIM Cylinder | By Owner | | ASSA |
| 1 | Closer | 4400 | 689 | YA |
| 1 | Wall Stop | 409 | US32D | RO |
| 1 | Smoke Seal | S88 | S | PE |

End of Section